

Modern

LITHOGRAPHY

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In this issue

Beginning a New Series:
Elements of Offset

How Do You Rate
a Salesman?

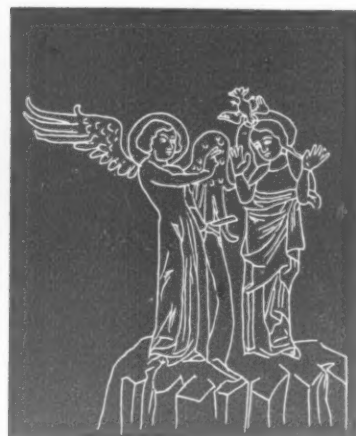
Switch To Offset
Brings Big Profits

Needed for Packaging:
Variable Web Cut-Off

Report on POPAI Show

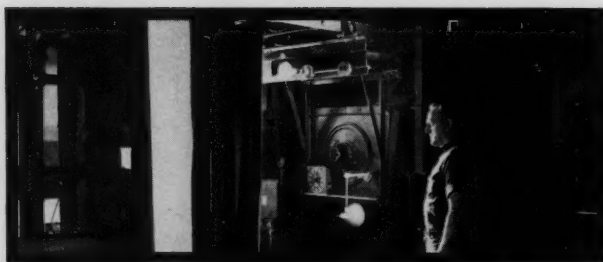
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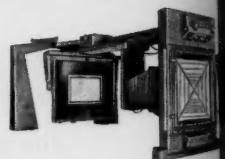


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MODERN LITHOGRAPHY

Vol. 29, No. 12 NOVEMBER, 1961

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Feature Articles

- How Do You Rate a Salesman? 12
By Vincent Doran
- Elements of Offset: The Process Lens 15
By William A. Pagan and Charles Olree
- Charts Show Trend of Sales, Profits and Color 19
- Switch To Offset Doubled His Income 20
By Mildred Weiler
- Wanted for Packaging: Variable Cut-Off for Web 22
By Gordon H. Dalsemer
- Lithographing the Photo 26
By Charles B. Taylor
- POPAI Show Includes "Ceiling Dangers" 33
By H. H. Slawson
- Annual Index of Articles In Modern Lithography 41
- 3-M Shows New Printing Products Plant 49

Departments

- | | |
|--|------------------------------------|
| Meetings 6 | Through the Glass 66 |
| Editorials 11 | Metal Decorating 69 |
| Photographic Clinic 24
<i>By H. P. Paschel</i> | News About the Trade 75 |
| New Product Review 29
<i>By J. M. Lupo, Jr.</i> | Litho Club News 99 |
| 25, 10, 5 Years Ago 48 | Equipment, Supplies, Bulletins 103 |
| Technical Section 50 | Classified Advertisements 113 |
| Technical Briefs 55 | Index to Advertisers 117 |
| | Tale Ends 118 |

Cover

Beautifully lithographed Christmas cards, produced by the Metropolitan Museum of Art, New York, depicting famous paintings and drawings in the museum's collection, are featured on this holiday cover. Our way of saying Season's Greetings to all our readers!

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BREVITIES

HAROLD W. BOYD has been assigned to the Eastern Regional Sales organization of the Oxford Paper Co. He will be located in the firm's New York office.

JOSEPH V. PERRIN has been appointed industrial sales representative for Watland, Inc., Chicago distributor of photographic equipment and supplies.

THEO. HOMMEL, INC., photo engineers of Berwyn, Pa., have opened a sales office in Chicago. Manager of the office is Leroy Andersen.

MEETINGS

International Printing Week, January 14-20, 1962.

National Association of Litho Clubs, Mid-Season Council meeting, Buffalo, Cincinnati and Shreveport (concurrent regional sessions) Jan. 27, 1962.

Lithographic Technical Foundation, annual Education, Members, Directors Meetings, Sheraton-Blackstone Hotel, Chicago, March 19-22, 1962.

Web-Offset Section, PIA, annual meeting, Cincinnati, May 2-4, 1962.

DRUPA Exhibit, Dusseldorf, Germany, May 5-18, 1962.

Lithographers and Printers National Association, annual convention, Boca Raton Hotel and Club, Boca Raton, Fla., May 7-10, 1962.

National Association of Litho Clubs, 17th annual convention, Miami, May 31-June 3, 1962.

Technical Association of the Graphic Arts, 14th annual meeting, Hotel Radisson, Minneapolis, June 11-13, 1962.

International Association of Printing House Craftsmen, 43rd annual convention, Pittsburgh, Aug. 12-15, 1962.

National Association of Photo-Lithographers, 30th annual convention and exhibit, Hotel Ambassador, Los Angeles, Sept. 19-22, 1962.

Printing Industry of America, 76th annual convention, Queen Elizabeth Hotel, Montreal, Oct. 1-6, 1962.

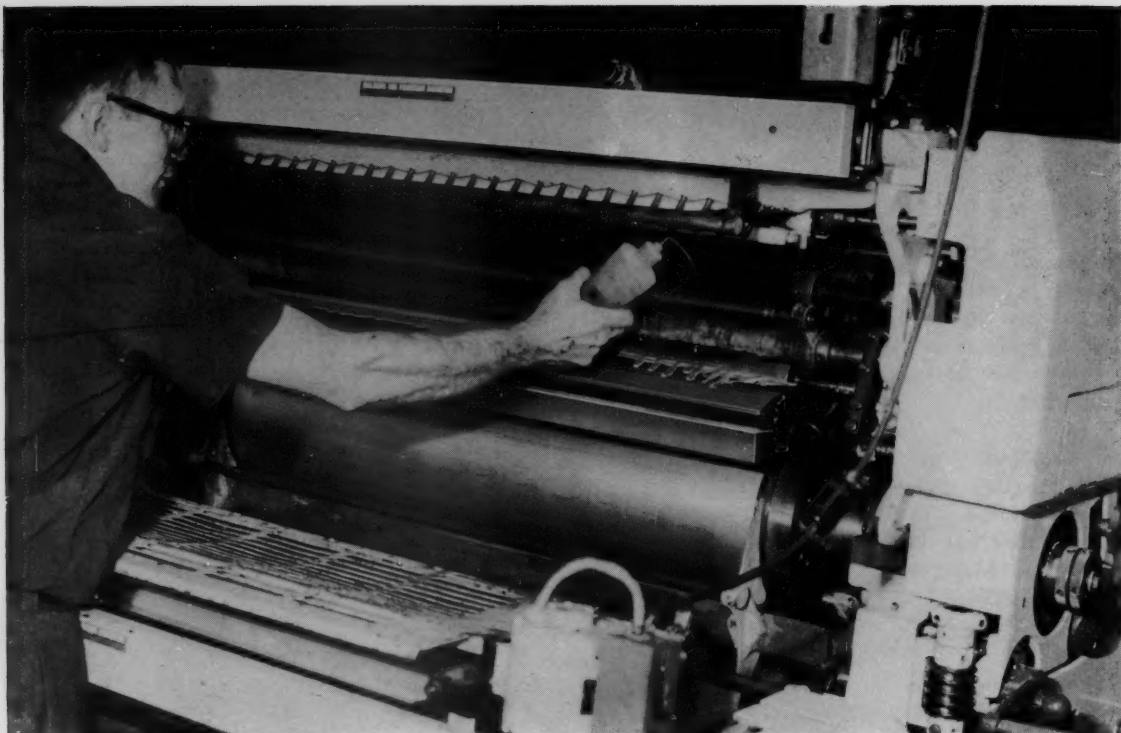
National Metal Decorators Association, annual convention, Queen Elizabeth Hotel, Montreal, Oct. 22-24, 1962.



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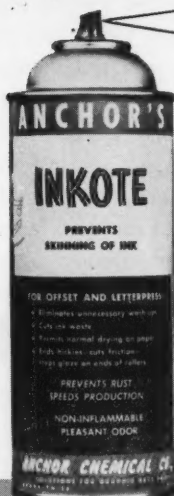
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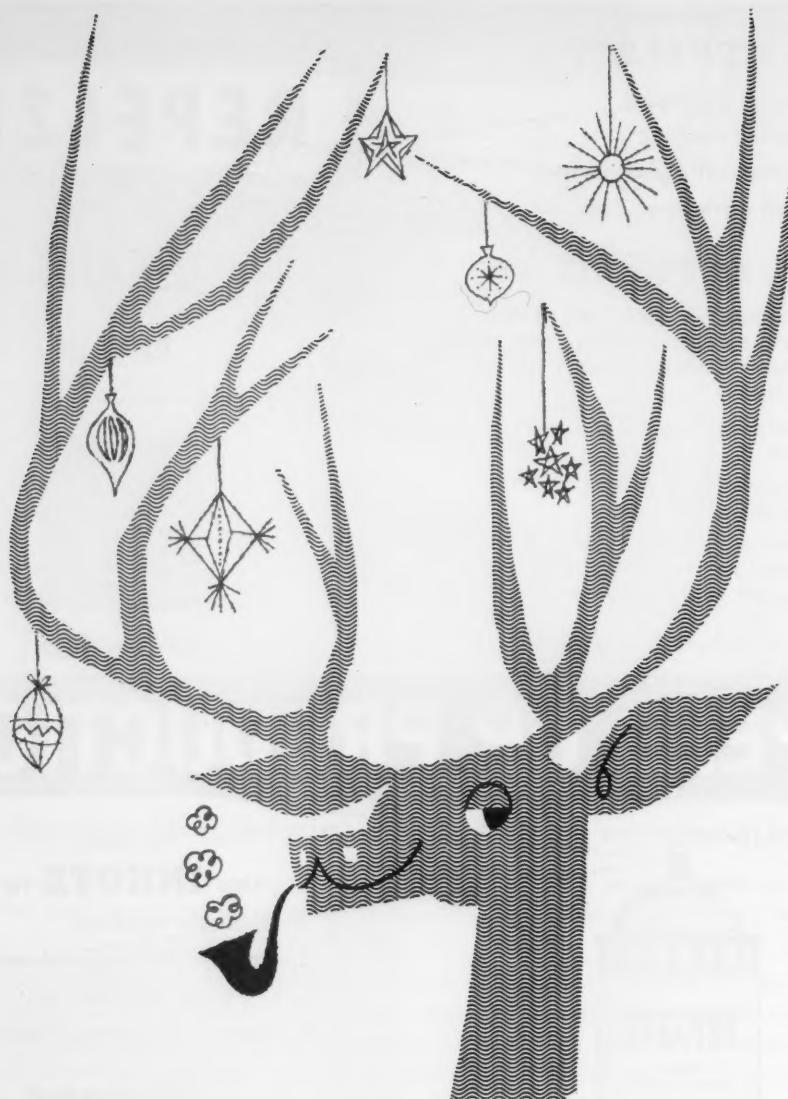
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CHICAGO

EDITORIALS



Lithographers Going Back To School

THERE was a time, not long ago, when the very idea of formal education for the printer — beyond the minimum requirement of the public school system—was scoffed at. Ever since World War II, however, when thousands of returning veterans were able to enjoy the advantages of a college education or similar vocational program, education has been viewed by lithographers as highly desirable, particularly for those employees who have ambitions to become foremen or managers in litho plants.

From management's point of view, it is of course highly advantageous to have employees with special craft and management skills operating or supervising complex and costly cameras, multi-color presses and other equipment which operates at sometimes fantastically high fixed costs per hour.

Management, in making the payments on modern equipment, where the cost of a single productive machine often runs well over \$100,000, sometimes overlooks the investment it has in personnel, which too can run into the hundreds of thousands of dollars during the career of an employee.

Granted that education is vital to our industry, how can it be attained, without disrupting the operation of the plant? To start with, of course, more and more young men considering the graphic arts as a career (influenced no doubt in part by one or more of the many fine films which supply firms and trade associations have distributed) are seeking formal training at vocational high schools and advanced institutions such as Carnegie Institute and Rochester Institute.

For those not fortunate enough to have such a well-grounded academic background there are other sources, among them the following:

1. The local Litho and Craftsmen clubs, featuring practical speakers on current shop problems.

2. Local graphic arts forums, LTF programs, and regional exhibits, offering up-to-date information on the various litho operations.

3. Work-shop conventions, national and regional, put on by the several national trade associations in our industry.

4. Part-time schools for foremen and top management, such as the NALC's nearly completed program at the foreman level to be conducted at the University of Michigan and PIA's Management Training Institute, already operating at Western Reserve University.

Furthermore, for those interested in a graduate program, South Dakota State College offers a graphic arts degree, as reported in a feature article in this issue.

In addition to these general programs, several of the larger firms in our industry have paid part or all of the cost of night school courses at local colleges for their more ambitious employees. They have found that the investment has been repaid with interest by greater productivity, and leadership on the part of these employees.

Coordinating many of the educational programs in the graphic arts is the Education Council of the Graphic Arts Industry, 1411 K St., N.W., Washington 5, D.C., which was organized about 10 years ago to promote careers in the industry, disseminate information about schools and colleges and award scholarships to deserving students interested in printing.

The lithographic firm that ignores the trend toward better educated personnel is missing out on an important movement in our industry. A better educated plant force is one of the best forms of insurance against the manpower shortage that will be felt increasingly in the coming years. ■

HOW DO YOU RATE A

By *VINCENT DORAN*

Assistant Sales Manager
Kenro Graphics, Inc.



HOW do you rate a salesman? By what criteria can the sales manager compare his salesmen to determine who is producing and who is not? Many sales managers have a ready answer for this question: Look at the books at the end of a month or year and compare dollar volume. The best man is the one who has sold the most business.

To be sure, dollar volume is the one most important factor in judging a salesman, but the thoughtful sales manager must consider other factors as well, particularly if he is attempting to judge a cub salesman — one who has not been on the force long enough to be turning in a high percentage of business. If the sales manager has no reliable yardstick for judging his men, he may keep mediocre men on his sales force for six months or a year longer than he would if he had paid more attention to their selling efforts.

A good salesman in the graphic arts must first have a good product — one that he believes in and one that can be of real benefit to his customers so that repeat sales follow. This applies equally to the salesman of printing equipment and the salesman of printing and lithography itself.

After that, it's a matter of using his time and energies efficiently to persuade prospects of the merit of his company's product.

Over the years I have developed a point system for rating salesman, allowing 10 points for an order, 3 for

E A SALESMAN?

a bid, 2 for a luncheon conference, 1 for a personal call and .2 for a phone call. I have found the system very helpful in judging the performance of my sales force and, more important, I have found that it provides a real incentive for every salesman — whether he is the “star” of the force or the greenest cub. It makes the salesman constantly aware of how he is spending — or wasting — his time and makes for more efficient operations.

Not everyone will agree with this method of scoring salesmen and even those who agree with it in principle may dispute the actual points awarded for the various types of calls. Certainly a big territory, necessitating much lost time between calls, must be fairly adjusted against a city territory, where calls can be made with very little traveling time.

Calculating Lost Time

SPEAKING of lost time, it might be well at the outset to see how many useful hours a salesman has each week and how much of this must be deducted for “fixed” lost time. Let us assume that the salesman has a five-day week. Customers and prospects can normally be visited only between 9:30 a.m. and 4:30 p.m., with an hour and a half deducted for lunch. This leaves two and a half hours available before lunch, and about three hours in the afternoon. Allowing a half hour for each call we find that the salesman could make 10 calls in an average day, but this optimum situation is rarely achieved.

Based on realistic experience, I have worked up the following table of lost time, on a weekly basis:

	HOURS LOST
1. <i>Traveling between calls</i>	5
2. <i>Time lost because of bad weather</i>	1
3. <i>Appointments not kept (by prospect)</i>	2
4. <i>Casual visits, prospect too busy to talk</i>	1
5. <i>Unproductive phone calls</i>	1
TOTAL	10

Based on our estimate of 5½ usable hours a day, we can see that — right off the bat — the salesman has lost nearly two days a week with wasted time.

How the salesman makes his contacts and sets up his appointments is his business. What I try to do with my point system is to assign a fair score for effort as well as for success. Salesmen who rate high for effort, but fail to bring in the orders, will soon be put in the spotlight as unprofitable workers.

Typical Day With Two Salesmen

TO see how the point system works, let's follow a new salesman — John — during a normal day and then do the same thing for an old-timer — Bill — to see what sort of scores they finish the day with.

Starting his day, our cub, John, drives to the first small city he has planned to visit. On arrival he starts phoning (9-9:30 a.m.) to his new prospects to find out if and when he may see and chat with them. At the end of half an hour, he has completed three calls. Two prospects were too busy to see him, but one was agreeable and a

1 p.m. appointment was set up. (So far John has scored .6 points for the three phone calls).

Using his call cards, note book, etc., John notes the comments of his prospects and the approximate date for call backs. It's 9:30 now, so John makes two calls on No. 3 prospects, with no success. (Note: In my system, prospects are rated by the number of calls previously made on them, before they become actual customers. A No. 3 prospect has already had three calls by the salesman.)

At 11:30 he calls on a No. 4 prospect, gets a dummy to bid on and, feeling pretty good, invites his prospect out to lunch, thus scoring 6 points in one visit: 1 for the call, 3 for the bid and 2 for lunch.

At 1 p.m. John is in the waiting room for his appointment made on his morning phone call. He shows his samples, answers some questions and suggests a return call in about a week with more samples — aimed specifically at this client. (1 point)

From 2 to 4 p.m. John makes two more calls on No. 5 prospects. After some general conversation he asks about the bids he had submitted a week previous and is told "nothing definite so far." (2 points)

At 4:15 John makes one more call, to a No. 6 prospect, and finally strikes paydirt. He finds that the bid he had submitted last month finally has been accepted and that the buyer is "mailing the order in tomorrow sure." (10 points).

John makes out his formal daily report, fills in his estimate of points earned for the day, and mails it to his sales manager. Here's what his scorecard would look like:

	POINTS SCORED
3 phone calls @.2	.6
7 personal calls @1	7.
1 bid (new)	3.
1 luncheon (conference)	2.
1 order (promised)	10.
	<hr/>
TOTAL	22.6

During the same day Bill, the old-timer, made two visits to No. 4 and No. 6 prospects, "fishing" for next month's orders, then drove to another city, had lunch with a No. 3 prospect, picked up a new bid and landed one new order. Here's how this point score looked at the end of the day:

	POINTS SCORED
3 personal calls @1	3
1 luncheon (conference)	2
1 bid	3
1 order	10
	<hr/>
TOTAL	18

It is important to award points, however small, for every call, in order to impress on salesmen the importance of everything they do. Over the years I have found

that, on average, a salesman lands one order in every 10 calls.

The luncheon conference, by the way, is a two-edged sword. If your prospect is impressed with the salesman, fine. It is just as likely that he may not like the sales story or something the salesman says.

When the sales manager receives reports from John and Bill the next morning, he notes that their scores were very close, although John expended a lot more effort than veteran Bill.

I have found that offering a prize for high point total for the month is a good stimulant to the sales force. Dollar sales swing upward almost automatically, because more calls are being made and the salesmen are using their time to better advantage.

Remember, "dollars sold" is an old-fashioned barometer, with the old-timers always out in front, to the continual discouragement of the newcomers on the force. The shrewd sales manager wants to build up dollar sales but he wants just as much to instill enthusiasm and confidence in the new man who may not yet be turning in the cash orders in any great amount. Even if the salesman has scored "O" on sales for a particular day, his score card will show him graphically that the time was not wasted.

Keeping daily, weekly and monthly tabulations gives the salesman a record to shoot at all through the year, an effective incentive during those barren stretches between orders.

System May Be Modified
SALES managers interested in this system may want to modify it to suit their own needs, with appropriate adjustments for size of territory, value of order received (for instance, 5 points could be awarded for orders under \$100, 15 for orders above \$1,000) and other special factors. One word of caution: when you are making adjustments to your system, put the proposed changes up to a vote of the staff, so your salesmen don't get the idea you are trying to stack the cards against them. After a three months test period, the sales manager will probably want to sit down with each man on his force to review his performance, look for weak spots, etc.

The point system takes all the guess work out of the salesman's thinking. Every day of the year he knows just how his actual and potential sales values add up. His daily dollar volume is the proverbial millstone that hangs heavy around the neck of every Knight of the Road. If he has a series of no-sale days, he starts to believe his luck, the weather, the prospects and even his good customers are against him.

With his point system he soon learns that as he sows he shall surely reap. He also learns more rapidly who his good prospects are and how many times to call on a prospect before dropping him for a more favorable prospect. He builds confidence in his talents and feels sure that his place on the sales force is secure. For the sales manager, faced with the never-ending problem of evaluating his salesmen — new and old — the points point the way!■



Starting a New Series:

Elements of Offset

Elements of Offset

The Process Lens: Theory and Application

1. Characteristics of light rays and problems of reassembling reflected light rays to form an image

THERE are many complicated steps involved in producing printed material. The camera performs one of the more complex tasks. It is complex not because the actual job of making exposures and processing the film is difficult, but because there seems to be a lack of understanding of basic lens theory on the part of the camera operator. A complete understanding of lens theory involves a wide range of technical information, and would be much too involved to present here. We will, however, attempt to simplify the theory and bring in its application to the process camera. One fact must be kept in mind: no one subject will be treated exhaustively. We are merely trying to present a unified series which will give the cameraman apprentice a fundamental understanding of his tools so that he can solve his own problems through the use of this basic knowledge.

A lens is basically a transparent device used to form an image by causing light rays reflected from an object to change direction when passing through. We can examine this concept more closely by beginning with the simplest example of lens-action — a pin hole in a box. A close look at the lens action of this type of camera will demonstrate the fact that since light travels at a

speed of 186,000 miles a second, it is unable to bend. It can only change direction. Therefore, light must travel in a perfectly straight line. Light beams which are reflected from an object disperse in all directions just as light emanating from a light bulb.

Figure 1 clearly indicates the behavior of reflected light rays. If we examine a particular beam which is reflected

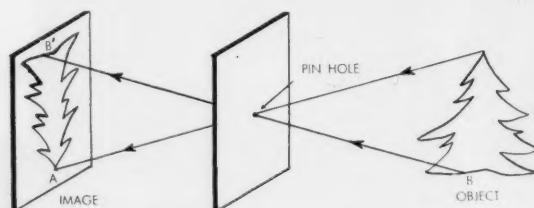


Figure 1. Because of the small size of the pin hole in the card, only one ray of light emitted at A will pass through the opening to the card beyond (A'). The same holds for a ray emitted from B. A series of these single rays collected from various parts of the copy will produce an image exactly like the object except it will be inverted.

from point A, we notice that it travels through the pin hole opening, and is arrested by the card behind the pin hole frame. By adding up all of the reflected rays of light from the image, each beginning at a different spot, the sum total will represent an image of the original object on the back surface. Since only those light rays pass through the pin hole which are in direct line with it, the image produced will be inverted. This illustrates the simple pin-hole lens.

Principle of Pin-Hole Camera

BECAUSE the hole itself in the flat divider acts as a lens, the whole unit is, in effect, a camera and as such, is capable of making exposures onto a light sensitive material. This type of device, with refinements, is used in exposing film negatives, whether for commercial photography, amateur photography, photoengraving, or photolithography. We must realize that since the pin hole of



By William A. Pakan (right), assistant professor, Carnegie Institute of Technology, and Charles Olree (left) assistant to the president, Baird, Inc.

necessity is very small, an exposure which would produce the desired result for a simple line shot would require an extremely long exposure through this kind of lens.

The amount of light necessary to expose the light-sensitive film would be such that the camera and the object would have to remain motionless during the entire exposure time, which, in some cases, would be over an hour. For copying work such as is done in printing, this element is no problem (providing the customer is willing to pay by the hour), but in action photography it becomes an impossibility. In order to eliminate this problem of long exposure times, the pin hole must be made larger, which logically would reduce the exposure time by admitting more light.

This indeed reduces exposure time, but adds another problem: focus. Figure 2 shows how the enlarged lens

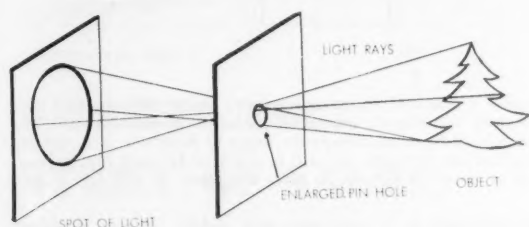


Figure 2. When the pin hole is made larger, more rays of light will pass through from each point — this will destroy the image and produce, instead, a round spot of light.

aperture cuts down on the legibility of the image. Once again, the light travels in a straight line from the object "A" to the image "A." This time there are many more individual beams of light permitted to pass through the opening to the card beyond, because the enlarged opening permits several beams reflected from each point in the image to pass through. Since there are more light beams grouped together on the card, the resultant image is just a round blur of the lens opening rather than a sharp reproduction of the object.

Although we have decreased exposure time, we have introduced another bad feature — a badly blurred image, or, depending on the exact lens opening, no image at all but rather a spot of light. The next step is to place a device in the enlarged aperture which will allow light to pass through, but at the same time change the direction of that light to a particular spot so that the image will be preserved.

As we mentioned before, light travels in a straight line, and will continue to do so unless something is placed in its path to interrupt its travel. This device can be in the form of a transparent material of a different density or an opaque material. In the first case, the light will continue through the transparent material; in the latter the light will stop completely. Since we are interested only in the materials which permit light to pass, we will examine them in terms of the effect that they have on a light ray entering their physical structure.

Light can be reflected or refracted, but for all practical purposes it cannot be bent while traveling in a given

medium. Since we will be concerned in this discussion only with the lens, we will look into the refractive property of glass and examine it in terms of controlling the light ray to suit our purposes.

When a beam travels from one medium to another, it has a tendency to change direction unless it strikes the medium perpendicularly, in which case it will go through without deflection. The change in direction is caused by the change in the speed of light in these materials. The amount and the direction of change depend on the density of the new medium. If the density is greater than air, the light will slow down and will be deflected toward the normal line — an imaginary line perpendicular to the surface of the material.

If the density is less than air, the beam direction will be away from the normal line. Figure 3 illustrates this

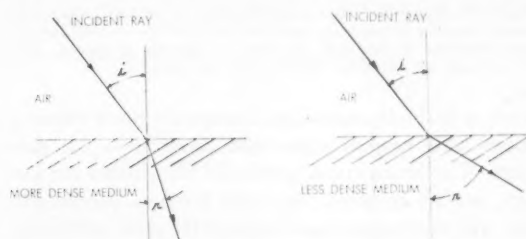


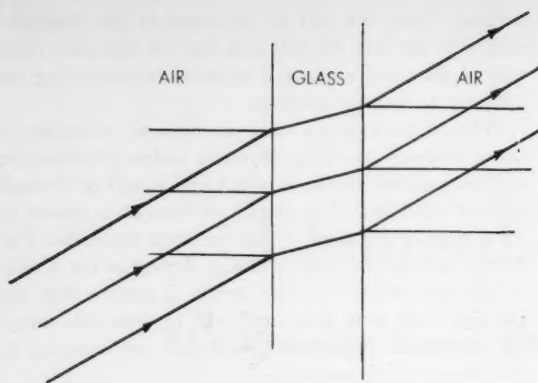
Figure 3. Light rays entering another medium from air will change direction, depending on the density of the new material, when compared with air. The angle of incidence is represented by "i" and the angle of refraction by "r". Figure 3 A (left) shows the directional change of the light ray when the new medium is more dense than air. Figure 3 B shows the directional change of the light ray when the new medium is less dense. . .

point very clearly. In Figure 3a the incoming ray makes a certain angle (i) with the surface upon entering the second medium (glass, water, plastic, etc.). The beam is deflected toward the normal line, indicating that it is slowed down in the dense medium. Figure 3b shows the reverse of this; i.e., the refracted ray is reflected away from the normal line, indicating that the light ray entered a less dense medium. We will concern ourselves only with the case 3a, since the lens is made of glass which is denser than air.

The index of refraction of a lens is simple a ratio of the speed of light in two adjacent media. In the case of the common lens, for example, it would be a ratio of the speed of light in air to the speed of light in glass. Other factors affect the index of refraction — if one wants to pursue this subject further — such as the difference of the speed of light in a vacuum compared to its speed in air, and the kind of lens glass used. It is sufficient to say, however, that the index of refraction denotes to what extent a beam of light changes direction from its original path in passing through different materials.

Making Rays Converge

WE have seen how light which enters a piece of flat glass is deflected. The question now is: How can these rays be made to converge at some predetermined



PARALLEL LIGHT RAYS

Figure 4. If parallel rays of light enter a medium, they will travel parallel through the medium and emerge — still parallel and traveling in the same direction — slightly displaced. This is true only for materials whose sides are parallel.

point to faithfully reproduce an original object? Figure 4 shows what happens when light beams hit a flat glass plate. The beams travel in parallel lines, strike the surface, and are refracted. Any light hitting a parallel surface will be refracted, travel through the glass, and emerge parallel. This would make camera focusing impossible. Therefore, we must find some way to bring these beams together at a predetermined point.

If we could make a piece of glass whose surfaces were not parallel, we could bring about a convergence of the light beams. Let us examine the effect of a glass prism on the light beams. Since its sides are not parallel, it fits into our requirements nicely. Figure 5 shows this clearly.

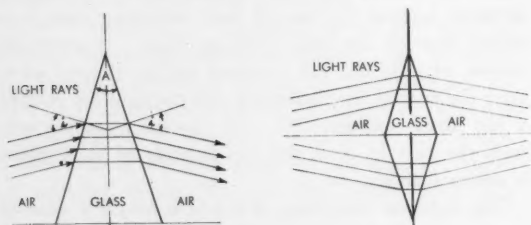


Figure 5. By making the sides of the glass triangular instead of parallel, the incident parallel rays will travel through the prism (triangular glass) and emerge, still parallel, but traveling in a different direction.

The rays enter the glass prism at a given angle of incidence (i) and are refracted toward the normal line at an angle of refraction, and finally emerge at the same angle of incidence (i). The path of the light will change as it passes through the prism and will be directed to a predetermined point, depending on (1) the refraction index of the glass, and (2) the apex angle A .

If we place prisms one on top of the other, inverting the bottom one, we have a system similar to a simple lens, (Fig. 5b). The only problem, however, is that the prism will not cause parallel rays to converge, but rather

cause each ray to be directed to a different point. Our problem is to get all the rays to converge at the same point. A refinement over the prisms would be to round off the triangular outside shape into one more circular in appearance. This slight alteration will cause parallel rays

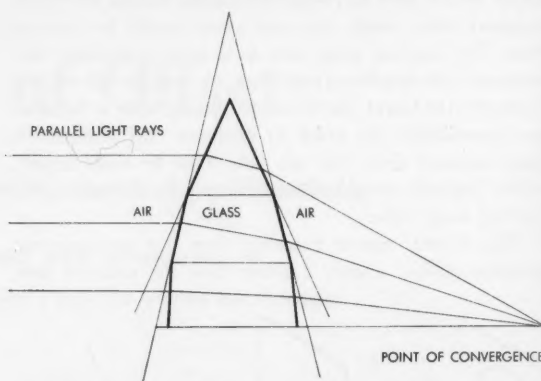


Figure 6. Parallel light rays can be made to converge to a point by changing the triangular surface to a round surface. The slight rounding will change the angle of incidence such that the angle of the emerging ray will be different for each ray, depending on where it happens to enter the glass.

to converge at a predetermined point. Figure 6 shows this graphically.

Lenses can also be used to diverge or spread out a series of light rays, and therefore we can group lenses into two general classifications: (1) the converging lens, and (2) the diverging lens. Figure 7 shows the basic

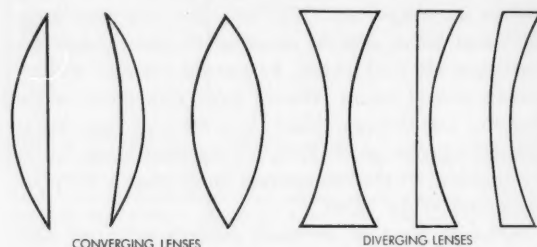
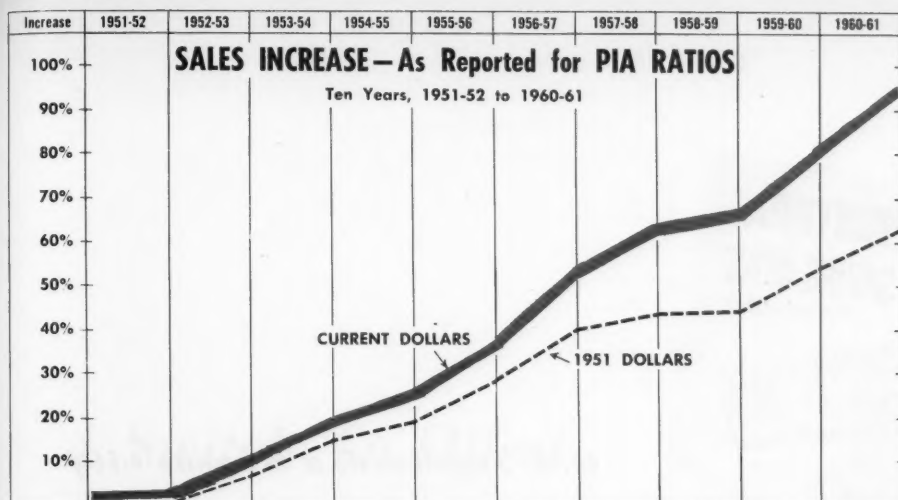


Figure 7. With the angles rounded off, the lens takes on a more conventional shape. Basically, these lenses are used either individually or in combinations in all kinds of photographic work.

types of converging and diverging lenses. They are identified by other names as well: convex and concave lenses, positive and negative lenses, etc.

Our original problem was to change the direction of the light beams and have them meet at a predetermined point. Thus far, we have been able to find a device to change direction of light beams, but how are we to know where they will meet!■

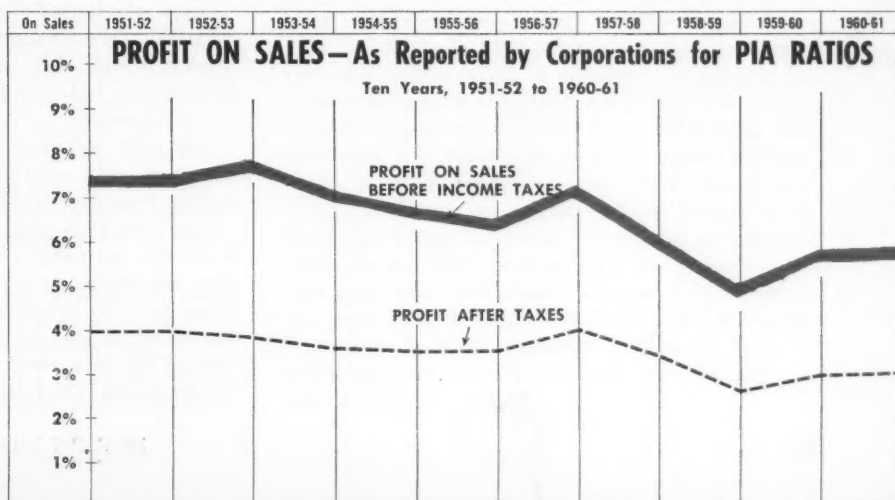
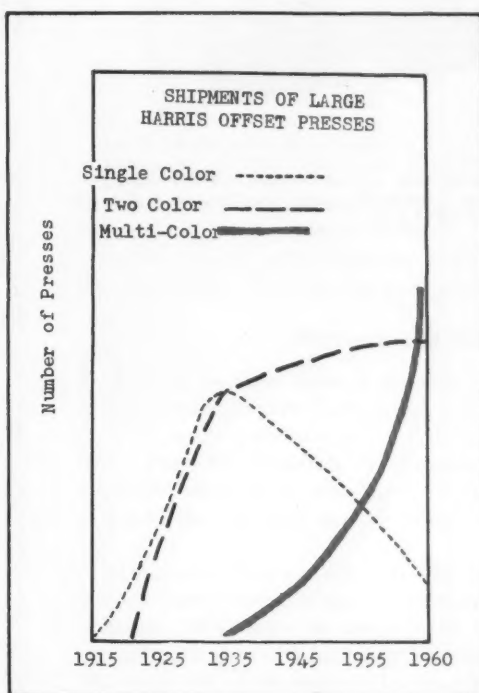
**NEXT MONTH: The Mechanics
of Enlarging and Reducing.**



CHARTS TELL STORY OF SALES, PROFITS, COLOR

MORE and more, in recent years, printers and lithographers have been paying close attention to industry statistics as a means of judging their own performance. This month three charts are available which cover long-range trends in sales, profits and color offset presses. The two PIA charts show the 10-year picture for sales and profits on sales — illustrating the apparent contradiction of falling profits in a period of rising sales.

The third chart, taken from the Harris-Intertype presentation at the recent PIA convention (*November ML, page 34*), shows the dramatic growth of multi-color litho presses and the concurrent decline of single-color presses in the larger sizes.





Replica of Civil War edition of Harper's Weekly is one of the show pieces of Clay County Publishing Co., Kansas City. At top is front page of a special tabloid mailer, in two colors, announcing Clay's purchase of a Goss Suburban web-offset press.

G. I. Sandford, a Kansas City printer, found in a year that

By MILDRED WEILER

St. Louis Correspondent

AN almost over night switch from letterpress to an all offset plant, doubled the income for the Clay County Publishing Co., in North Kansas City, Mo., in one year.

"We had our best year just before we decided to change to offset," G. I. Sandford, vice president and major owner of the company told ML. "But, we were missing out on bids and could not get the quality we wanted."

With very little selling effort, the company kept its old letterpress customers by converting their jobs to offset, and added many new customers. The company prints 14 weeklies including four of its own, one of them being the *News Dispatch*, Missouri's largest paid circulation weekly.

Since switching to offset the company also expanded successfully from solely newspaper operation to the commercial field. In between publication schedules the company produces tabloid shoppers, broadsides, handbills, window banners, self mailers and catalogs.

Total sales jumped from \$250,000 a year ago to nearly \$500,000. "We are doing \$22,000 worth of business per employe a year," Mr. Sandford said. The company has 20 employes, including two editors, office help and advertising salesmen.

The plant operates on a one shift basis but runs the presses at night only; the platemaking typesetting, and mailing being done by day.

The installation of a Linofilm photocomposition unit, a year ago, is credited with giving the plant a better product and increasing productivity. "We use fewer employes with the Linofilm than we did with hot metal, because we can turn out more composition with this equipment. "We do as many as 60 pages made up and ready for the camera in two days." Mr. Sandford explained.

A Switch To Offset Doubled His Income

Photocomposition Saves Time

ONE of the time savers is the ability of the Linofilm to punch the copy on a tape, set heads and body text all in one operation and justify margins. The operator makes his selection of type face by touching a key. The Clay County Publishing selection includes Spartan Black, Spartan Book, Spartan Medium, Bodoni, Corona and Caledonia, all on one magazine.

The 50-foot role of punched tape is taken from the Linofilm keyboard unit and put into the photographic unit, which electronically processes the tape and photographs the type on paper. This becomes the reproduction proof or copy which is used to make up the page. Because several jobs may be set on one roll, an employee cuts proofs according to jobs and files them in a drawer according to client and job number. This requires less space than metal and a job is easier to locate.

When it is time to make up a job, the employee takes out the proofs and runs them through a Schaefer coater to put wax on the galleys for paste up. This, too, is faster and makes a neater paste up. Because the Linofilm system photographs the type directly on paper which is used for paste up, the company also saves considerable time by dispensing with the submission of proofs to customers. "We had to sell them on this idea," Mr. Sandford explained, "but we showed them how much better the product looks, and that with this system we had a better check on errors and they didn't need to read proof." Today only four or five will occasionally ask for proofs, he added.

The company uses a 24" Brown camera and shoots halftones separately in the conventional way. Because of the flexibility of photographic typesetting, type can be set on angles, which is particularly handy in the creation of broadsides. Plates made in the plant are wipe-on alum-



Sandford

inum. Printing at the 35 x 125' one-floor plant is done on a four-unit Goss Suburban web-offset press. Average run on the weeklies is 8,000 to 10,000.

On the 16-page tabloid shoppers, which are tabloids, the run is 20,000. Two rolls are used for an 8-page paper.

Reproduction of Harper's Weekly

ONE of the show pieces of the plant is the printing of reproductions of Civil War editions of *Harper's Weekly*, a job acquired since the switch to Linofilm and web-offset. Pages for the weekly are photographed from original 1861 copies of this newspaper. "It takes 3½ hours to handle this job from start to finish," Mr. Sandford said.

The production of catalogs is another segment of the business made possible because of a better product and economy. "We can set the type so much faster, and we certainly save space in storing copy for a 96-page catalog. We simply file all the negatives for reuse in a very small cabinet, and this is certainly much better than standing forms of hot metal for a 96-page book," he advised.

In addition to its other services, the plant also maintains mailing lists for all its customers. In order to increase efficiency and productivity still farther, the company expects to put all its subscription lists on IBM cards. The system will then also be used to do the company's billing.

Mr. Sandford came home from World War II and decided to go into the printing business because of his fascination with a publication—*Wednesday Magazine*—which he had been receiving from his community for some time. The first few years were rough, he admitted, but today he is printing the publication which inspired him, largely he thinks, because he could switch horses in mid-stream and buy and install the right equipment—offset—at the right time. ■



wanted for packaging field:

Variable Cut-Off

for web-offset press

By GORDON H. DALSEMER

Technical Consultant
Baltimore, Md.

DURING the past decade lithography has made almost phenomenal progress in two important fields. One of these is web-offset for the commercial newspaper and publication market. It is said that there are more than 1,000 web-offset presses now operating in the United States, and all but a handful of these have been started up within the past 10 years.

The other growth field is that of packaging and, specifically, folding cartons. Ten years ago the number of folding carton manufacturers who used lithography in their plants could be counted on your fingers. Today the amount of offset equipment used in the industry constitutes a major market, and even those boxmakers who haven't yet installed sheet-fed lithographic equipment in their own plants usually have arrangements with paper lithographers to run jobs that can't be handled on letterpress or gravure equipment.

These two segments of the graphic arts—web-fed offset and sheet-fed offset — have caused a real revolution in the respective fields mentioned above. They offer advantages that can be obtained in no other way — advantages of speed, economy and quality — that no cost and market-conscious printer or packager could overlook.

It is fascinating and somewhat ironic to note that these lithographic systems have advantages and disadvantages which are the exact opposite of the other. Here is a real

study in contradictions. The web-fed offset presses in use today have the tremendous advantage of running from webs or rolls which allows them to print at higher speeds and save the cost of sheeting. On the other hand, these presses are limited by the fixed size of their cylinders.

The sheet-fed press, on the other hand, has the advantage of being able to print an infinite number of sizes within its range, but has the great disadvantage of using only sheets, which cost considerably more than stock purchased in rolls.

It is my opinion that a marriage of these two presses will be the greatest boon to the lithographic industry since the discovery of offset. It will result in removing the disadvantages of both and compounding the advantages. Here will be a machine printing from rolls at speeds of 1,000 or more feet per minute in any number of colors and coatings. Ovens will flash dry the ink and the web and coatings. Any size box, label, or wrapper can be accommodated without waste. Quality of printing and register will be excellent. Ovens will flash dry the ink and the web can be further processed in-line or rewound.

Lithography for Folding Cartons

LET us examine a little more closely one segment of the enormous packaging industry — folding cartons. Until shortly after World War II virtually all folding cartons were manufactured on flat-bed letterpresses, and there had been no major improvements in the field for a generation. Gravure began to make some inroads in the late 40's and 50's because it is a process which could utilize rolls as they came from the mill and because it is possible to complete certain parts of the manufacturing of folding cartons in-line with the printing process. In those days many carton printers believed that gravure would eventually become the answer to all their dreams. It did then, and still does, a good job in certain specialized fields, but it has lost its impetus because of some very severe limitations. In brief, they are as follows:

1. Cost of gravure preparatory work and cylinders is significantly higher than either letterpress or offset.

2. The high cost of gravure inks is a factor that many printers learned to their dismay after installing the equipment.

3. Although gravure gives an acceptable quality on some surfaces, it cannot give as high a quality as offset and does not meet the requirements of many package purchasers.

It was in order to reach these desired quality levels that so many package manufacturers, including those with gravure equipment, turned to sheet-fed offset.

Like every other segment of the graphic arts, the packaging industry is interested in greater speeds along with higher and higher quality. The present dependence on sheet-fed equipment is the greatest obstacle in achieving our goals. It is fairly obvious why the package manufacturer is not able to utilize the web-fed offset presses currently on the market. He is producing custom-manufactured packages for many customers in many different sizes. As prices of commodities rise and fall, the sizes of many

of the packages must be adjusted accordingly, and, therefore, his equipment must be able to cope with an infinite number of variations.

Some months ago a rather careful study was made to compare item by item the cost advantages, if any, of web-offset over gravure and sheet-fed offset. Here are some of the interesting facts which were turned up:

1. It costs approximately \$20 more a ton to buy boxboard in sheets compared with rolls. Even small and medium-sized manufacturers of cartons are apt to use several thousand tons of boxboard a year. The savings of web over sheet-fed equipment in this area alone are very large.

2. It has been calculated that a web-fed press can produce in a given period about 50 percent more tonnage and, therefore, 50 per cent more dollar volume than a sheet-fed press.

3. In comparing offset with gravure, a study of a number of typical jobs indicates that the cost of gravure cylinders is on the average 45 per cent higher than that for offset engravings and plates for the same job.

4. Ink is a very heavy factor in packaging because many packages are solidly covered. The figures in the study showed that the cost of rotogravure inks is between 35 and 40 per cent higher than lithographic ink.

5. Many companies operating both gravure and sheet-fed equipment have learned that there is a significantly higher waste factor in the operation of gravure equipment. The same experience would hold with web-fed offset, but there is no reason to believe that it will be higher than gravure.

6. As part of the study, a series of typical jobs was estimated on the basis of gravure, sheet-fed offset and web-fed offset. Web-fed offset showed consistently the lowest price, or the highest percentage of profit, whichever way you may wish to put it.

Variable Cut-Off Needed

THE idea that the graphic arts and packaging industries need a web-fed offset press with an infinitely variable cut-off or repeat is not a new one. A recent patent search shows that filings were made as long ago as 1929, and a whole series of patents have been issued since that time, none of which apparently has turned out to be practical for the manufacture of quality packaging although there appear to be a few machines that are being used to make business forms, bags and perhaps other paper products. The difficulties of building such a press on an economically sound operating basis are readily apparent. Both web-fed and sheet-fed offset presses are built today with fixed cylinder diameters for the plate, blanket and impression cylinders. Quite obviously, if all three of these must be changed every time the repeat size is changed, the cost becomes unbearable. A new and quite different approach is needed to solve the problem.

The individual or company that first produces a practical web-fed offset press with an infinitely variable cut-off or repeat will make a contribution to the industry which will cause a great step forward in graphic arts. Can such a challenge to American ingenuity pass unheeded?

PHOTOGRAPHIC CLINIC



What Are The Primary Colors?

By HERBERT P. PASCHEL

Technical Editor

Q: I have always been under the impression — ever since grade school art classes — that the primary colors are red, blue and yellow, and that impression was supported by a recent television program, Disney's "An Adventure In Color," sponsored by Kodak. Yet, your column always stresses magenta, cyan and yellow as the primaries. I'm confused. Just what is the truth?

J.F.F., POMPTON PLAINS, N.J.

A: The truth is that somebody goofed. The color explanation given in the TV program was nothing more than a perpetuation of the simple, but erroneous color explanation taught in the lower grades of elementary schools.

The terms red and blue should not have been used at all. But since they were, there should have been some definition given as to the specific characteristics of the colors quoted. As it stands, the terms red and blue only lead to confusion. A red that absorbs blue and green light, and a blue that absorbs red and green light would not make the mixed colors demonstrated on the TV program. In mixing two paints the resulting color is approximately that which is common to both of them. If yellow and blue-green pigments are combined, the result is green because this is the color common to the two pigments. But if a truly blue pigment

It is impossible for Mr. Paschel to give personal replies by mail, but all questions will be answered in this column as soon after receipt as possible. The columnist also is available to the trade as a consultant for more complex litho problems.

is mixed with yellow the result will be approximately black. Similarly, a mixture of red and blue will also be black.

I am sure that Kodak did not intend to disseminate misinformation, although that is precisely what happened. In many Kodak publications an effort is made to clear up the confusion created by incorrect terminology and popular misconceptions. The following excerpts are a few examples. The first is from Kodak's Color Data Book, *Color As Seen And Photographed*.

"As everyone who has ever used a set of water colors probably knows, a large variety of colors can be matched by making appropriate mixtures of three suitably chosen primaries, commonly called "red," "blue" and "yellow." If the range of colors so produced is to be as complete as possible, however, the "red" will really be a magenta and the "blue" will really be a blue-green, or cyan. It is unfortunate that the quoted names have so often been used, because their use in this sense has

undoubtedly acted as a bar to a more widespread understanding of the principles of color mixture."

Luckiesh, in 1923, said somewhat the same thing:

"Most persons arrive at their scanty knowledge of color mixture through the use of water-colors or pigments and owing to certain misnomers confusion is widespread. Furthermore, when colored lights are to be mixed the error is commonly made of basing these mixtures on the principles of mixing pigments. Many books by artists contain glaring errors in regard to color mixture . . .

"The artist's primary colors or the primary colors of the subtractive method are commonly named red, yellow and blue. They are more accurately designated as purple (*magenta*), yellow and blue-green." (*Light and Color in Advertising and Merchandising*, M. Luckiesh. D. van Nostrand Company, 1923).

In several Kodak Graphic Arts Data Books the following may be found:

"In the past, Kodak publications have referred to the three process printing inks as "yellow," "red," and "blue." Although these are the accepted terms in the trade, this practice is confusing in discussions on masking. It is now our practice to call the process printing inks yellow, magenta and cyan, as in other fields of color photography."

As you can see, Kodak is in favor of using the terms magenta, cyan and yellow to designate the subtractive primaries. How they became a party

to the perpetuation of confusion is a mystery to me. I am even more puzzled by this event in view of the fact that the program involved Walt Disney Studios, Eastman Kodak Company and Radio Corporation of America. These three organizations have on their staffs some of the leading color scientists who, I am sure, would have preferred a more accurate explanation.

Luckiesh points out that it is difficult to understand the additive mixture of colored lights (the principle of color TV) if the reasoning employed is that of the subtractive principle. How much more difficult must it be if there is any confusion as to the colors involved.

On the TV program under discussion, an explanation of how color TV works was given after that of paint mixture. I am sure many viewers must have been puzzled why red, blue and yellow make all other colors in one case (paints), and red, blue and green in the other (TV). For certain mixtures to occur, the colorants must have specific characteristics regardless of the color name employed. But when the color name gives no clue as to the nature of the colorant, or the same name is given to two radically different colors, then the inexperienced become hopelessly confused.

For this and many other reasons, it is important that color terminology be correct when explaining color theory and color mixture principles. The use of the popular, but misleading color terms on the TV program is what confused you, and probably thousands of other viewers. (See also the November column.)

Gaseous Burst Agitation

Q: Some photographers using gaseous burst agitation claim that the gas helps prolong the life of the solution. Is this true?

G. H. M., NEWARK, N. J.

A: While the useful life of solutions may be extended by the agitation system, it is not likely that the gas in itself acts directly as a preservative by chemical means. Nitrogen is purposely selected because of its inert chemical character. Any other gas,

if equally inert, could be employed. Nitrogen is used only because it has two decided advantages over other gases—low cost and an extremely low reaction rate.

Prior to the gas burst system it was necessary to agitate the film hangers by hand periodically throughout the entire development cycle. This inevitably introduced a great quantity of air into the solution. With the gas burst technique, the hangers are usually agitated by hand only for a brief period when they are first placed in

the tank. The opportunity to introduce air into the developer is thus less than with the completely manual technique. This reduction in air content alone prolongs developer life considerably. In addition, the inert gas escaping from the surface of the solution displaces air which would otherwise react with the developer components.

Any extension in solution life with the gas burst technique is, by present evidence, an accidental benefit and not a property of the gas. ■

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Lithographing the Photograph

By CHARLES B. TAYLOR

Litho-Krome Company, Columbus, Ga.

THE advertising industry has placed upon lithographers the task of lithographing the photograph with fidelity, with higher and higher standards of technical excellence, and with flexible production capabilities to meet a wide variety of situations.

Let us discuss briefly three significant factors which confront us as lithographers, each of which requires a new approach to our task of lithographing the photograph.

1. Smaller Photos Being Used

First, the trend of our leading photographers toward the creation of original color photography, in the form of smaller photographs, and the problems which we inherit in their reproduction. The problems presented by the enlarged reproduction of $2\frac{1}{4} \times 3\frac{1}{4}$ " and $2\frac{1}{4} \times 2\frac{1}{4}$ " transparencies are manifold. They are as complex as they are varied. We are all familiar with the deceptive characteristics of the transparency. To the naked eye it may appear as sharp as a needle in its original size. However, with each degree of enlargement there is a marked loss of sharpness and relative loss of detail and definition. The grain of the film itself is magnified by its enlargement. The result of enlargement of considerable magnitude is the inevitable grainy appearance of the reproduction when viewed from a near distance.

From an address delivered at the 29th annual convention of the National Association of Photo-Lithographers, New York.

Of course, imperfections in the transparency are one of the critical problems in the enlargement of a small photograph. There is nothing more dispassionate or objective than the camera lens. Every scratch or mutilation and each fragment of dust or dirt will be magnified and become an objectionable part of the enlarged reproduction if not detected and removed from the transparency.

Our company printed a calendar which was produced from $2\frac{1}{4} \times 2\frac{1}{4}$ " Anscochromes. The art direction and photography were by Victor Keppler. The backgrounds were rendered in pastel chalks. A total of 1,728 photographs were taken to provide an ample selection, for the photographer and client, from which to choose 12.

One of Litho's Principal Challenges
THIS calendar provides an interesting example of one of the principal challenges which confront lithographers today. In the past we have produced the calendar from 8×10 " transparencies. The creative photography was by the same photographer and the format of the calendar was similar. However, the photographer, in order to achieve a new mobile feeling and candid expressions, abandoned his 8×10 " camera and used a $2\frac{1}{4} \times 2\frac{1}{4}$ ". This is not an isolated example of this concept. It is indicative of a trend and presents a challenge to our technique and capabilities.

Based on our experience, we cannot urge too strongly that you become a part of the planning and creative phases of the projects on which you will serve as lithographers, whenever it is possible to do so. It will implement the effectiveness of the photographer-lithographer team and it will pay off in the technical excellence of the finished production.

2. Using Type C Prints

THE second challenge, which confronts us also pertains to copy. I refer specifically to the problem of producing top quality portrayal from Type C prints. Although the manufacturer has changed the designation of Type C to Ektacolor, we shall, in this discussion, use the term Type C Print because it is best known to most of us. While this kind of copy has been reported to be ideal for reproduction purposes, there is reasonable doubt that the record will substantiate this claim. Much photographic research has gone into the negative-positive color system. This research has given us reflective copy, Type C prints, produced from color negatives. These color prints comprise yet another kind of copy to challenge the lithographer's capacity in this era of accelerated change.

The fact of change, change in itself, is not new to the lithographer. In the fast moving span of a few years, since just prior to World War II, we have many innovations. Some of us remember the Dufaycolor color process and the Chromatone. Both were effective as original color copy. These are, of course, now obsolete and, except for a few pioneers, are either forgotten or unknown to the craftsmen and technicians manning the graphic arts today.

Then came possibly the finest representation of all—the carbro. With all of its capacity for detail and fidelity of color it lacked the characteristics of economy of dupli-

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Speeds up the Job and Improves Results!

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Built-In Latitude gives Reprolith Hy-Ortho more "safety margin" in exposure and development without impairing image quality.

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Be sure to take advantage of this big news . . . by ordering Reprolith Hy-Ortho on .004" Plestar from your Ansco Dealer! . . . Ansco, Binghamton, N. Y. A Division of General Aniline & Film Corporation.

Ansko

*Reprolith
Hy-Ortho*

cation. It was just as time consuming and costly to make the second Carbro of a photograph as it was the original. In spite of the unexcelled quality of the Carbro, we can probably count on our hands the studios and laboratories of the nation that still make Carbros. The death knell of this fine example of craftsmanship and copy source was sounded and the Dye Transfer was heralded as its replacement.

The Dye Transfer is a fine source of color copy for the lithographer, where the original is a transparency. It is especially functional where material—art work or type—is to be added to a color illustration which is in transparency form. The dye transfer's capabilities in fidelity, brilliance and detail are excellent. Furthermore, additional copies of a dye transfer can be made economically, a distinct advantage over the carbro.

We are all aware of the effort which is going into the promotion of Type C prints. These possess advantages in providing multiple color prints, which can be expeditiously processed for layouts, and which greatly simplify the preparation of camera-ready copy. But, it seems to me, most of the Type C prints that are available today have a long way to go to approximate the quality of the Dye Transfer. Yet it takes little perception to foresee that the use of Type C, as original color copy, is replacing other media. Will the Type C, with all of its limitations, replace the Dye Transfer in the foreseeable future? If the present trend is an indication, perhaps we can, even now, see the handwriting on the wall.

This is a critical change which challenges the capabilities of our entire industry! Its consequences are vital, for it directly affects the quality of our product. Although Type C prints are reported to be ideal for reproduction, we have not found them so. The color range is much greater than it is possible to duplicate with ink on paper. For example, deep reds, blues, greens, and blacks are much deeper in tone than our process inks will reproduce. This is a major problem; but not nearly so serious as the fact that shadow detail is difficult to maintain in all photo-mechanical reproduction, and this is particularly true, when trying to recover it from a Type C print.

T 3. Improving Black and White Reproduction HE third challenge is that of improving black and white reproduction by offset lithography.

In our determination to improve the quality of process color in the last decade we have, as an industry, admittedly neglected black and white. The demand for color, by our patrons, has placed emphasis and urgency on the reproduction of color. Our trade organizations, our research activities and the suppliers of the lithographic industry, have kept pace with the demand. All of these have provided materials, equipment and technology with which we have fulfilled the requirements of the advertising industry insofar as process color is concerned.

Now, what has happened during the last decade, in the development of quality black and white by offset lithography? Why, practically nothing nothing has happened! As far as black and white is concerned, it has

been the same gray medium that it was 10 or 15 years ago!

With all of the progress and improvement in lithographic papers, offset presses, rollers, blankets, plates and inks, none of these has materially improved the mediocrity of offset black and white. With all of the research and productive development that science has performed, in improving the technology for our industry to raise the standards of black and white production, there is a minimum of tangible evidence that we are exploiting the scientific knowledge and equipment which has been made available to us!

The challenge of the production of quality black and white by offset lithography confronts us! The demand exists! We need not abandon this market to either letterpress or sheet fed gravure!

So, now, the question presents itself! *What can we, the quality minded lithographers, do about it?* The answer can be found by utilizing the tools and techniques which science has provided. This discussion concerns *one* concept, and a brief description of the technique involved in *one* approach to the problem at hand. At our company we have produced black and white subjects in two impressions. We call this Litho-Krome Black. Please bear in mind that while it is two impressions, the sheet has gone through the press only once. Both sheets traveled through the same two-color press one time.

Now, how is this an example of taking advantage of what science has provided? First, it makes use of an obvious technological advancement built into the press equipment itself. Since our production presses are of two-unit construction, it should be the natural procedure to use both units whenever possible, even when printing black and white. This scientific advantage is exploited by putting black ink on both units and laying down two impressions as each sheet passes through the press. There are two different black plates, at 30° apart, one carrying the high-key portion of the subject, the other plate, the shadow.

Second, while two impressions of black are applied, a scientific instrument is used to read a control spot on the back edge of each sheet. How much ink is carried on each unit? As much as can be transferred without offsetting or refilling. Specifically a maximum density of 1.85 to 2.00. The result will give the depth of a fine glossy photograph.

There are, of course, many other scientific achievements which have been made available to lithography that make these reproductions feasible and possible. For example, stable base photographic films insure fit. The improved magenta contact screen is a marvel of convenience and control! Improved plates, and coatings, as well as refined densitizers, have played an important role in increasing our quality potential. Deep-etch copperized aluminum plates were used for the production of the two-impression jobs. However, quite possibly, presensitized plates could have done an equally effective job. Perhaps presensitized plates would have added even more fidelity, and at a more economical cost. ■

NEW PRODUCT REVIEW



A New Device for

Maintaining Consistent Color

By JOHN M. LUPO, JR.
Di-Noc Chemical Arts, Inc.

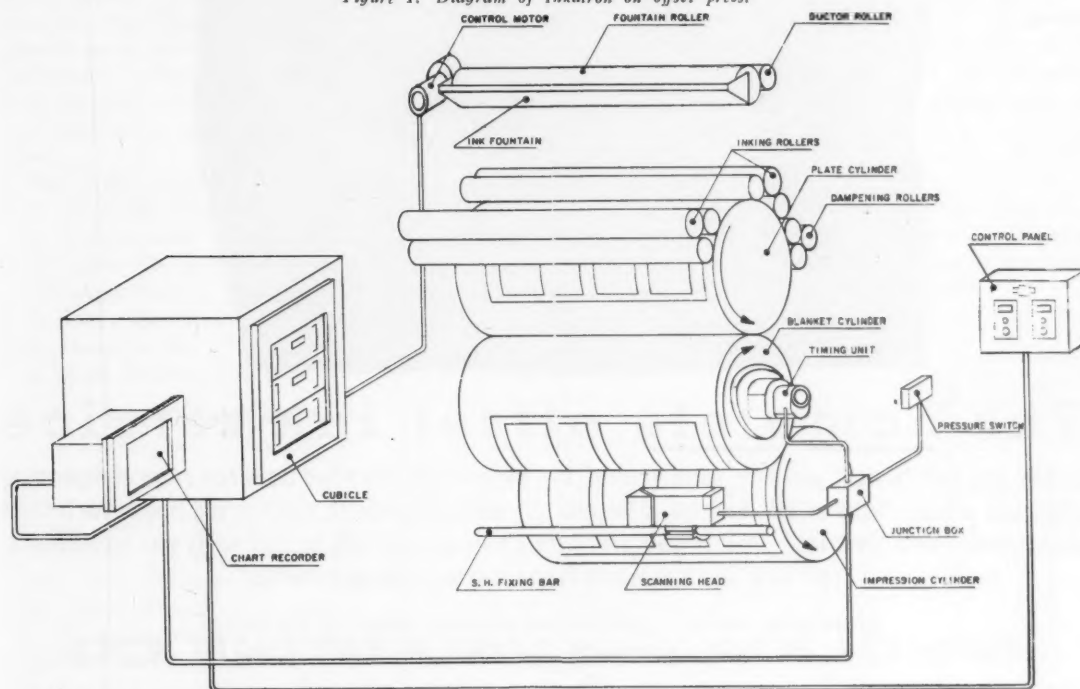
IT is difficult to single out the one most important variable in the lithographic process, however, the daily problem of maintaining consistent color throughout the press run, undoubtedly ranks high. Checking press color in the average litho shop is left entirely to the visual judg-

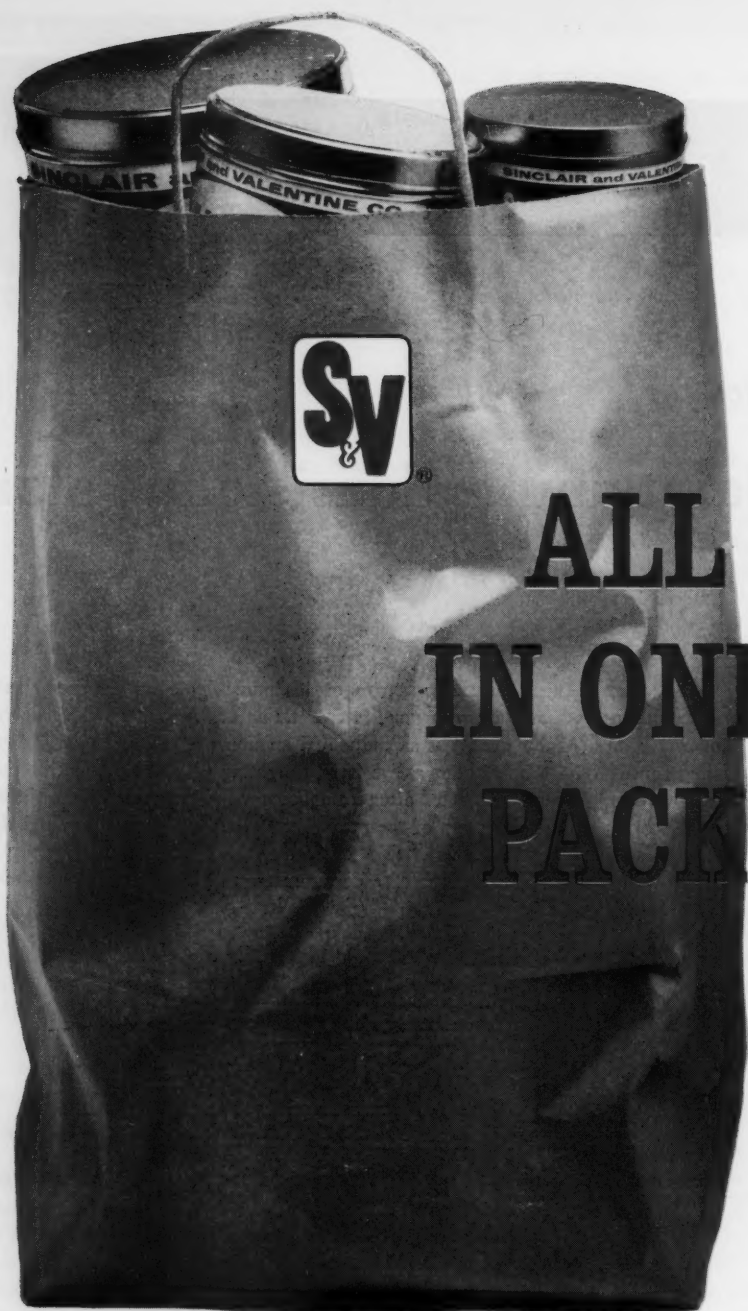
ment of the pressman or his immediate supervisor, and interpretation of color quality is an individual opinion.

Such factors as eye fatigue, lighting conditions, etc. often complicate visual inspection of the press sheet, even by the experts. To overcome this problem the use of a densitometer to

check the press sheet has become quite popular. This operation involves the reading by a reflection densitometer of color control patches (solids) by the use of the three separation filters — red, green and blue. These densitometer readings give data on ink density and color contamination.

Figure 1. Diagram of Inkatron on offset press.





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Density readings are taken at set intervals throughout the press run and standards established. Variations from the standard alert the pressman to make the proper adjustments. A more detailed explanation of this procedure is available in the LTF publication, *Color Separation Photography*.

While the use of this system is a tremendous improvement over visual interpretation, the reflection density method does have certain limitations, in that the specific amount of correction must be interpreted and there is a time lag from notice of the error to its correction. It would seem logical that a continuous recording densitometer capable of reading each sheet, coupled with a device that could control the ink fountain, would unquestionably be a major step toward elimination of this problem, and this is basically what the Inkatron does. This instrument, manufactured by J. F. Crosfield Ltd., London, continually measures ink density and evaluates and controls ink film thickness on sheet or web-fed presses. (Figure 1).

Inkatron In Use

When the approved copy has been obtained during makeready, the meter on the Inkatron control panel is adjusted to zero. Thereafter, the unit operates as a continuous recording densitometer, measuring variations from the approved sheet and making corrections on the ink ductor mechanism.

The system consists of:

1. A Scanning Head
2. A Timer Unit
3. Control Chassis
4. Control Panel
5. Control Mechanism
6. Main Cubicle
7. Chart Recorder (Optional)

1. The Scanning Head

The scanning head is mounted on a bar between the side frames of the press at a small distance from the impression cylinder. It scans a color control patch and produces an electrical signal corresponding to the color being measured. This signal is fed into the main cubicle which contains an electronic computer. The sensitive scanning head can detect a

variation of as little as $\frac{1}{8}$ of one per cent of the color density.

2. Time Unit

This unit synchronizes the scanning head to the plate cylinder and also to the specific portion of the sheet to be measured.

3. Control Chassis

This is housed in the main cubicle and processes the signals received from the scanning head. The control chassis evaluates the color of the printed sheet and also controls the circuit which actuates the ink ductor control mechanism.

4. Control Panel

Information received from the control chassis indicates the density change in percentages on the panel meter. This unit contains all the controls necessary for operation.

5. Control Mechanism

This small electric motor is coupled to the duct adjusting mechanism and is controlled by the automatic circuit of the control chassis.

6. The Main Cubicle

This consists of the control chassis, computer and the main power supply.

7. The Chart Recorder

This produces a continuous recording of ink densities by a series of dotted lines representing the density of each of the colors. A one per cent change in ink density, which would be unnoticeable to the human eye, gives a sideways movement of .05 inch on the chart. The paper speed is one inch per hour, giving the chart a life

of 30 days of press operation.

Accuracy of Unit

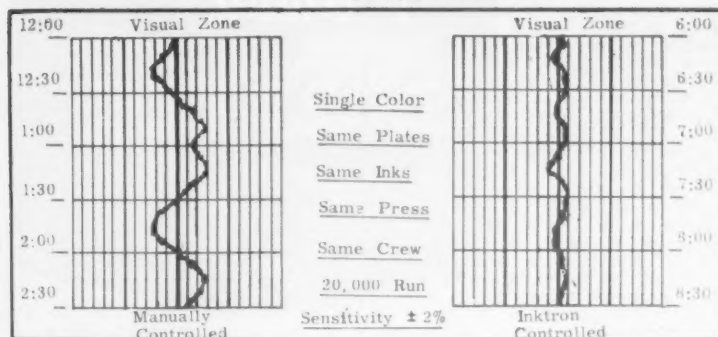
Figure 2. shows an analysis of an actual printing operation on a Mann Press. The sensitivity of the scanning head was set at a maximum of two per cent. In the manual control column, the Inkatron was used as a monitoring device only, and the densities of the ink film were recorded on a chart recorder. The shaded portion represents the nonvisual zone, which means that as long as the graph falls within the shaded portion, the eye cannot see the difference in color. However, when the graph goes outside the shaded portion, the variation becomes visible to the eye. In the chart at the right, the Inkatron was put on fully automatic operation, showing that there were no color changes visible to the eye during the length of the run.

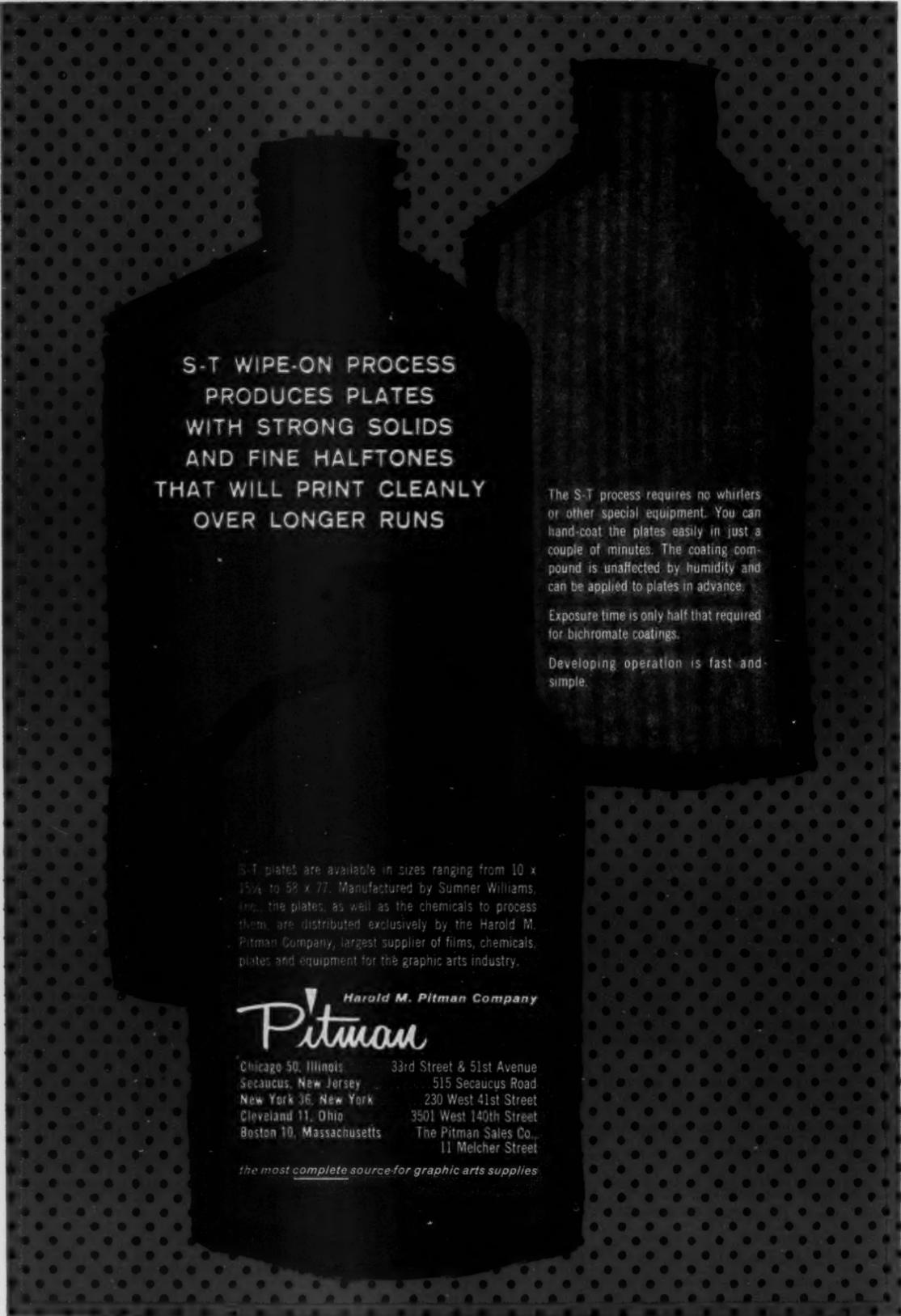
Interpretation Required

It might appear that an instrument such as the Inkatron could solve all the press problems involving color, however, that is not so. The pressman will still have to make ready, adjust fountain keys, etc., and approve a printed sheet before the Inkatron can be used. This unit will only standardize on the approved sheet and not establish its own color standards. However, it will eliminate color variations throughout the run, improving and standardizing on overall quality.

Here, again, is illustrated the application of electronics, clearly indicating its importance in the advancement of our industry. ■

Figure 2. Analysis of production run.





S-T WIPE-ON PROCESS
PRODUCES PLATES
WITH STRONG SOLIDS
AND FINE HALFTONES
THAT WILL PRINT CLEANLY
OVER LONGER RUNS

The S-T process requires no whirlers or other special equipment. You can hand-coat the plates easily in just a couple of minutes. The coating compound is unaffected by humidity and can be applied to plates in advance.

Exposure time is only half that required for bichromate coatings.

Developing operation is fast and simple.

S-T plates are available in sizes ranging from 10 x 15 1/4 to 58 x 77. Manufactured by Sumner Williams, Inc., the plates, as well as the chemicals to process them, are distributed exclusively by the Harold M. Pitman Company, largest supplier of films, chemicals, plates and equipment for the graphic arts industry.

Pitman
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Chicago 50, Illinois	33rd Street & 51st Avenue
Secaucus, New Jersey	515 Secaucus Road
New York 36, New York	230 West 41st Street
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the most complete source for graphic arts supplies



'CEILING DANGLERS'

added to POPAI show

By H. H. SLAWSON

Chicago Correspondent

THE superior position of the lithographing process for production of point-of-purchase advertising displays was emphasized in the second annual merchandising awards contest sponsored by the Point-of-Purchase Advertising Institute last month in Chicago. Among the 36 classes of displays admitted to the contest lithography, with one exception (silk screen), was the only printing process recognized under contest rules. This class was subdivided into five groups — lithographed units for wall, counter, floor and window displays and a fifth, quite new, for ceiling units.

Chicago Show Printing Co. received the first award for the latter section, which was officially termed a "ceiling dangler." By others it is also called a "mobile." Chicago Cardboard Products Co. was credited with the mounting and finishing of this dangler, a brilliantly colored design, produced for the Dodge division of Chrysler Corp.

Many of the award winners were entered by advertising agencies and brokers and the lithographer was not identified in the credits. Among those whose names appeared in the printed list of First Place winners were Schmidt Lithograph Co., Progress Lithograph Co. and Consolidated Lithographing Corp.

Another 55 Merit Awards were made by the judges. Among lithographers receiving these were three of the four named above, Chicago Show Printing Co., Schmidt and Consolidated. Others identified were Simmons-Woodward, Inc., Einson-Freeman Co., Industrial Lithographic Co. and Snyder & Black & Schlegel.

The award winners were featured in a "Hall of Fame" at the McCormick Place exposition center in Chicago during the 15th annual symposium and exposition of the Point-of-Purchase Advertising Institute, Nov. 7-9. Virtually every facet of the multi-billion dollar display business was represented by nearly 100 exhibitors who presented their services and facilities to more than 4,000 registered visitors.

In a tour of the show ML noted one significant development — the emergence of lithographic trade shops which limit their business exclusively to the printing of sheet plastics that are to be used for vacuum forming to obtain a three dimensional effect.

Typical of these was the Buhl Press of Chicago, whose production manager, Miss Claire L. Gloesing, explained that her firm does nothing but the lithography for the 3-D displays and also for illuminated signs. The com-



pleted printing job is turned over to the client who has the vacuum forming done elsewhere. Buhl Press, founded eight years ago, lithographs on styrene, vinyl, acetate, Mylar, metalized butyrate and other types of plastics. For the illuminated signs, four-color process work is done on both sides of the plastic sheets.

New Waterproof Cloth

EINSON-FREEMAN Co. made its first public showing of a display which uses a new type of waterproof cloth that, according to Robert Clayton, sales manager, permits halftone four-color process work for outdoor displays. Progress Lithographing Co. featured its new "Panoramic" continuous display rolls, lithographed in 4, 5 and 6 colors on corrugated stock for which the company claims to be the exclusive producer. John J. Bruder, vice president for sales, was in charge.

Simmons-Woodward, Inc., had an extensive display of almost everything in the way of printed advertising materials. The 54 presses for all processes which the company operates in its 300,000 sq. ft. St. Louis plant, it was declared, can deliver "a complete package" for advertising and merchandising use. Typical products shown included counter and floor displays, animated cardboard displays, calendars, packaging, decalcomanias, labels, and beer coasters.

Schmidt Lithograph Co. announced the availability of display products printed on a new type of silk fabric, laminated to a paper backing, with which "you can get a better quality printing job" as explained by James Adams, production planning manager. Along with this up-to-date feature, he said, certain jobs are printed from plates produced by the ancient and now seldom used hand crayon or "tusche" process. The 85-year-old San Francisco firm, has set its goal for a 20 percent increase in its point of purchase display business for 1962.

Industrial Lithographic Co., New York, featured services which provide a complete year's program, from the original idea to distribution of the finished materials. As specialists in creation of point-of-purchase displays, Industrial exhibited a line of unique flashers and motorized units, floor and counter merchandisers, outdoor displays, direct mail calendars, packaging, labels and other items.

Snyder & Black & Schlegel, New York, boasted a bit about the fact that, even though its history goes back 117 years (founded 1844), the company still is winning blue ribbons. Prominently displayed was the most recent prize,

a POPAI Merit Award for the "Four Roses Ice Cake," created for the summer promotion of Four Roses Distillers Co. In tune with the November spirit SBS also featured a realistic, life-size turkey to be used as a ceiling dangle for meat store promotion. Shown too, was a series of transparencies for the 1962 Oldsmobile promotions. O. H. Stark, vice president, sales, was in charge.

Inland-Magill Weinsheimer Co., Chicago, which was recently acquired and reorganized as a division of Haynes Lithographing Co., Rockville, Md., showed a complete line of unique point-of-sale displays, illuminated signs, direct mail, booklets, pamphlets, etc. Also, for examination, was an assortment of catalogs printed on web-offset presses. Anthony Borre, sales manager, was in charge.

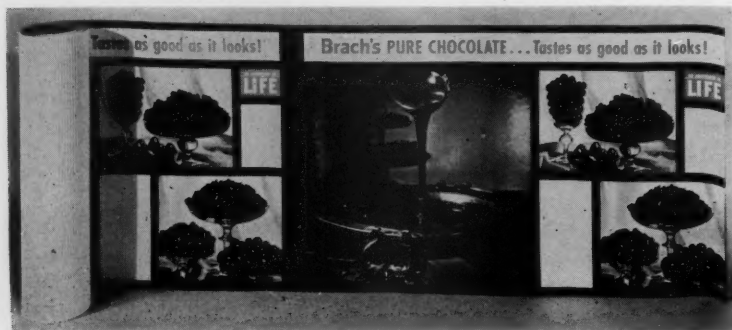
Other Lithographers Represented

AMONG other lithographers not previously mentioned, who occupied booths at the show were The Hennegan Co., Cincinnati; Inland Displays division of Inland Lithograph Co., Chicago; Meyercord Co., Chicago; and U. S. Printing & Lithograph div. of Diamond National Corp., Cincinnati. Numerous lithographic brokers also presented their services in developing displays that are produced for them by various litho firms.

During the Chicago meeting a series of symposiums was held to discuss problems peculiar to use of P-O-P advertising in food stores and supermarkets, service stations, beer merchandising, department, appliance and hardware stores, liquor and drug stores. There was general agreement by speakers that P-O-P advertising is an increasingly important area of sales promotion, but that it must be integrated with advertising, personal selling, publicity and other sales elements to be most effective.

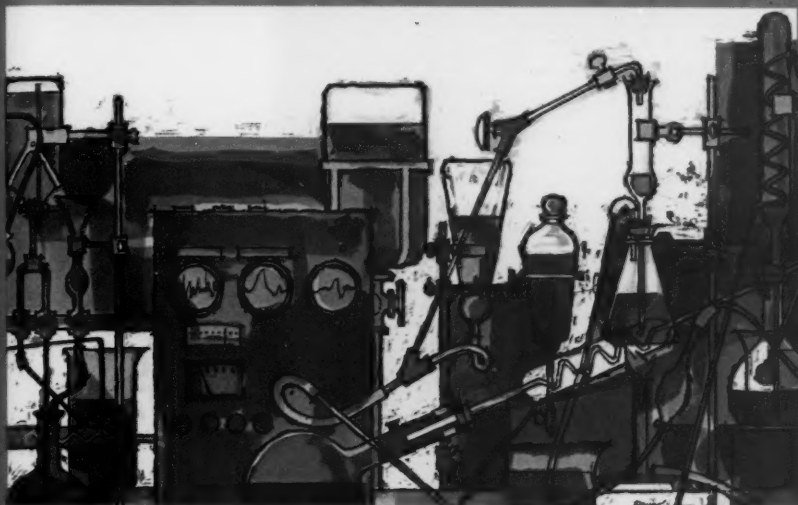
Robert L. Reck of General Mills, Inc., declared that the very competitive nature of today's supermarket merchandising demands a more effective creation, design, construction and use of all P-O-P materials. Emphasizing use of the materials, he related case histories of his company's experiences with ineffective displays and with others from which more successful results followed when certain basic rules, which he outlined, were applied.

The care needed to get displays into use was touched on by various speakers. Alfred P. Meaume, of American Oil Co., pleaded for better taste in use of displays around service stations. It isn't necessary to scream our sales message," Mr. Meaume declared. He suggested that station operators should get rid of the "cluttered" effect their advertising produces, "clean house and dress up."



Progress Lithographing Co., Cincinnati, won first prize in the single-faced corrugated division in the Point-of-Purchase Advertising Institute's second annual merchandising awards contest. The winner, a single-faced corrugated roll, was produced for E. J. Brach & Sons, Chicago, for use in various retail outlets.

3 ways to look and feel important



ANNUAL REPORT OWEN CHEMICAL COMPANY **1961**

1

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Cover to make
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impression**

...for annual reports, booklets or catalogs where you want to combine beauty and protection. Hammermill Cover prints handsomely by any process. You'll find it scores and folds obediently.

Use Hammermill

2

**Cover to
attract
attention**



...for advertising mailers or other selling pieces, whenever you want a stock with a substantial feel...with strength to withstand rough handling in the mails...with a flash of color. Hammermill Cover offers you a choice of Radiant White and nine rich colors.

3

This side printed by OFFSET...for printing by Letterpress, see other side



The Golden Horn

PARKWOOD'S HOUSE OF FINE FOODS

Luncheon Specials

FRESH SLICED MUSHROOM OMELETTE with Home Fried Potatoes	1.55
SHIRRED EGGS with Seafood a la Newburg, en Casserole, Home Fried Potatoes ...	1.55
SEAFOOD A LA NEWBURG with Toast Points, en Casserole	1.55
DEEP FRIED FILET of BOSTON SOLE, Tartar Sauce, Cole Slaw	1.45
BRAISED SHORTRIBS of BEEF Jardiniere, Home Fried Potatoes	1.65
IRISH LAMB STEW with Fresh Vegetables, Steamed Dumpling, en Casserole	1.55
CHICKEN A LA CREOLE with Rice, en Casserole	1.55
SIRLOIN STEAK SANDWICH, Toast, Home Fried Potatoes	1.95
CHICKEN SALAD PLATE, Hawaiian Style, Garnished	1.60
COLD SMOKED WHITEFISH PLATE, Garnished, Potato Salad	1.60
FRESH SMOKED KIPPERED SALMON PLATE, Garnished	1.50
COMBINATION PLATE—Sliced Ham with Swiss Cheese, Potato Salad	1.60
CHEF SALAD BOWL A LA GOLDEN HORN, Salami, Chicken, Swiss Cheese	1.60
INDIVIDUAL CAN of TUNA, Sliced Tomato	1.45
COLD CHOPPED CHICKEN LIVER PLATE with Cole Slaw, Garnished	1.45
INDIVIDUAL CAN IMPORTED BONELESS and SKINLESS SARDINES, Potato Salad	1.45

Above Dishes Include Coffee, Bread and Butter

Special Sandwiches

Three Decker Club Sandwich: Sliced Turkey, Bacon, Tomato and Lettuce	1.25
Open Chicken Sandwich, Hard Boiled Egg, Sliced Tomato	1.10
Corned Beef Sandwich with Pickle95
Fresh Shrimp Salad Sandwich, Chopped Egg85
Tuna Salad Sandwich with Cole Slaw85
Chopped Chicken Liver Sandwich with Slice of Tomato, Onion, Cole Slaw85
Smoked Lox Sandwich with Onions and Cream Cheese on Rye85
Baked Ham Sandwich with Pickle85
Western Sandwich85
Deviled Egg Salad Sandwich	

Today's Homemade Desserts

Apple Crunch Pie	
Toasted Coconut Cream Pie	
Peach Deep Dish	
Sour Cream Cheese Cake	
Fresh Strawberries and Cream	

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...for menus, table tents, or any job where a good printing impression makes the best selling impression. Hammermill's exclusive Neutracel® pulp provides the firm, level surface good printing requires—offset or letterpress. Ask your Hammermill Merchant for a sample book and more information on versatile, hard-working Hammermill Cover.

HAMMERMILL COVER

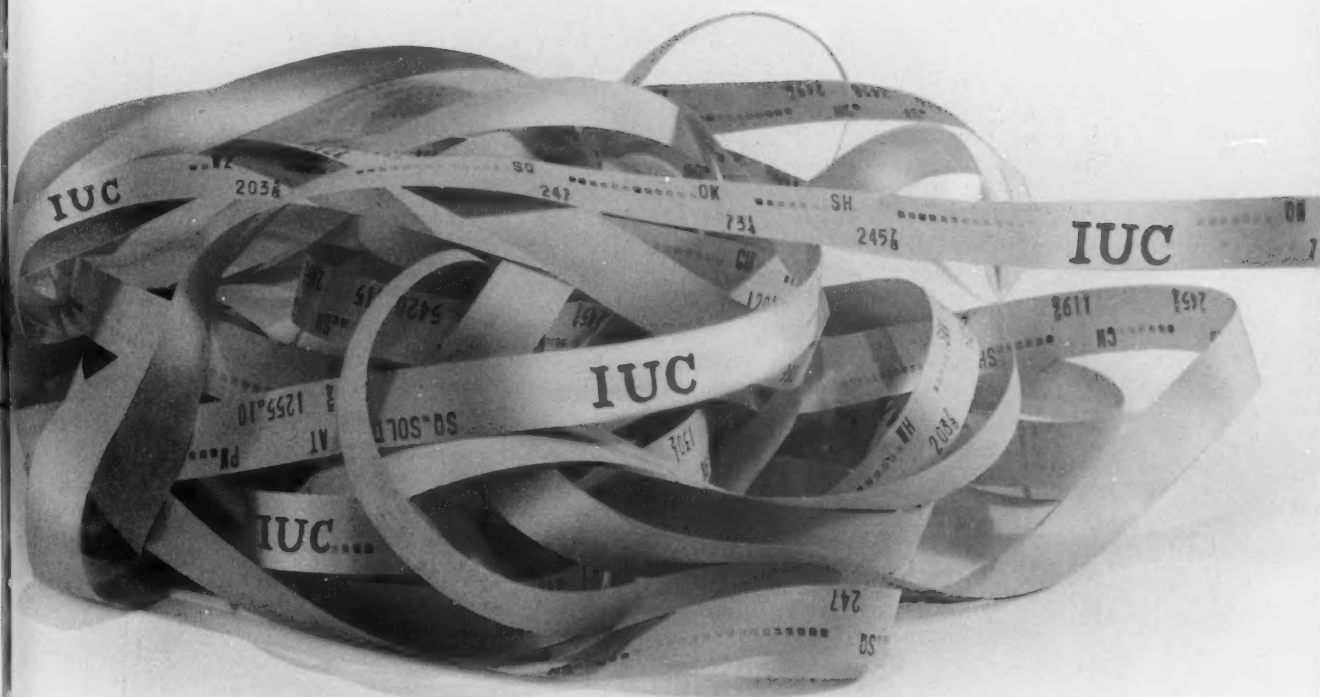
Hammermill Paper Company, Erie 6, Pa.

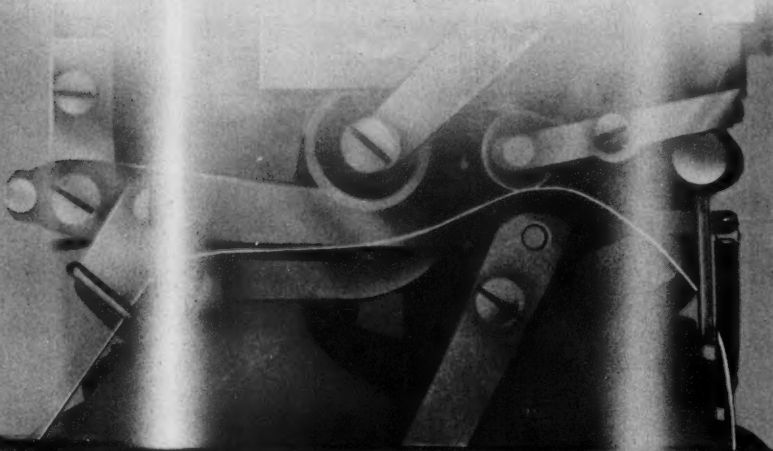
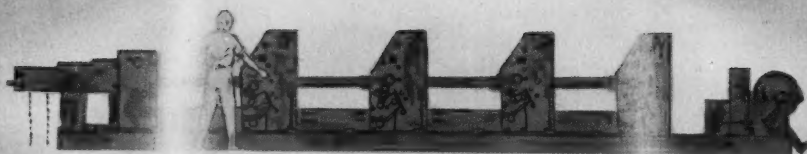
The preceding page of this insert was printed by offset, this page by letterpress. Four-color and duotone reproduction on the offset side. Sheet size 25½ x 38, eight up. Paper is Hammermill Cover, substance 65, Radiant White, Antique finish.



This side printed by LETTERPRESS...for printing by Offset, see other side

A
NEW
TREND
IN THE
WEB-FED
MARKET





IUC

Wall Street experts say that the more successful traders increase their earnings by converting slow moving (obsolete) stocks into the more progressive issues as soon as the trend is apparent. Thus, their money yields a maximum profit return.

Now is the time to exercise the same decisive economic judgement in converting your slow moving (obsolete) equipment into progressive, profitable WEB-OFFSET. The trend to web-offset is more than apparent. And Clary's new INTEGRAL UNIT CONSTRUCTION design is a gradual development program that enables you to fill your immediate press requirements . . . and add additional units (at no premium cost) as your production requirements expand. Invest in IUC now! You're not just buying equipment, you're investing in secure, profitable stock in the printing industry!

For IUC details contact: CLARY CORPORATION, GRAPHIC ARTS DIVISION, Box 562, Ft. Worth, Texas.



Everyone Likes Gilbert

Superase Bond

TAKES
PRINTING
BEAUTIFULLY ———

ERASES LIKE MAGIC ———

TOPS FOR
QUALITY
APPEARANCE ———

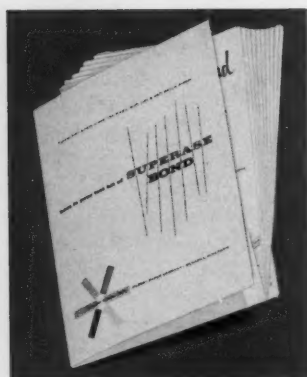
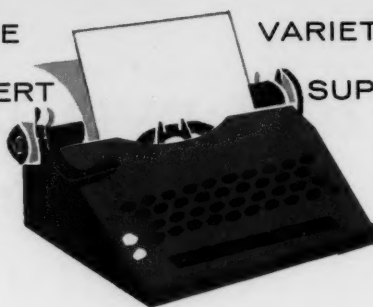


You erase mistakes . . . even whole phrases . . . like magic, with just a soft rubber pencil eraser. They erase cleanly, too . . . no smudge . . . no smear. Superase, with 25% new cotton fibre content, also has a quality appearance. It looks like regular bond paper, including the crisp cockle finish always associated with quality papers. And Superase Bond gives a beautiful letterhead impression by *all* reproduction processes. Send for sample kit containing a generous supply of Superase Bond and Superase Thin.

type here ↑ then erase ↑ try its **erasure quality** yourself

GILBERT SUPERASE BOND IN A WIDE
SIZES AND WEIGHTS, INCLUDING GILBERT
THIN (sub. 9), IS AVAILABLE FROM
AMERICA'S FINEST PAPER MERCHANTS

VARIETY OF
SUPERASE



**SEND FOR THIS FREE
SAMPLE KIT**

Contains an ample supply
of Gilbert Superase Bond in
all weights, including
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Send for it today.



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Los Angeles *Carpenter Paper Company
San Francisco *Carpenter Paper Company

COLORADO

Denver *Carpenter Paper Company
Pueblo *Carpenter Paper Company

CONNECTICUT

East Hartford *Green & Low Paper Co.

DELAWARE

Wilmington *Whiting Patterson Co.

DISTRICT OF COLUMBIA

Washington *Stanford Paper Company
Washington *Virginia Paper Company

FLORIDA

Jacksonville *Jacksonville Paper Company
Jacksonville *Virginia Paper Company
Miami *Everglades Paper Company
Orlando *Central Paper Company
Pensacola *Pensacola Paper Company
St. Petersburg *Pinellas Paper Company
Tallahassee *Capital Paper Company
Tampa *Tampa Paper Company
West Palm Beach *East Coast Paper Co.

GEORGIA

Arlanta *Sloan Paper Company
Macon *Macon Paper Company
Savannah *Atlantic Paper Company

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IOWA

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Des Moines *Birmingham & Prosser Co.
Des Moines *Carpenter Paper Company
Sioux City *Carpenter Paper Company

KANSAS

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Wichita *Wichita Paper Company, Inc.

KENTUCKY

Louisville *Louisville Paper & Mfg. Co.

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Baton Rouge *Louisiana Paper Company Ltd.
Monroe *Louisiana Paper Company Ltd.
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Duluth *Duluth Paper & Specialties Co.
Minneapolis *Carpenter Paper Company
Minneapolis *General Paper Corporation
Minneapolis *Inter-City Paper Company
St. Paul *Carpenter Paper Company
St. Paul *General Paper Corporation
St. Paul *Inter-City Paper Company

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Jackson *Townsend Paper Company

MISSOURI

Kansas City *Birmingham & Prosser Co.
Kansas City *Carpenter Paper Company
St. Louis *Beacon Paper Company
St. Louis *Birmingham & Prosser Co.
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When using Kodak films and plates, don't inadvertently forsake all the extraordinary image quality built into the emulsion. You're entitled to this quality. And you get it for sure when Kodak processing chemicals are at work. Negatives and positives that come right the first time comprise our goal. And we get there with chemicals as well as emulsions.

Take, for example, the development of line or halftone images on Type 3 Kodalith Films or Plates. For some time now we have pointed out Type 3's remarkable latitude, contrast, and dot-etching capacity. To gain these features, and to keep them constant all day long, Kodalith Super Developer was made. (This works for Kodalith Royal Ortho Films and Plates, too, which have a faster emulsion with even greater dot-etching capacity.)

Kodalith Super Developer has a tray

life that no other developer can equal, which means one doesn't have to compensate for speed loss due to overspent developer.

Production rate in the darkroom stays constant. Make-overs are uncalled for. Here's a string of more qualities of this developer: high capacity, clarity, ease of mixing, uniformity (meaning it can be depended on from one package to the next).

A worthy competitor these days to Kodalith Super Developer is our new Kodalith Liquid Developer in Cubitainer® packages. Now, in a minute or two, the man in the darkroom can easily prepare a fresh batch of long-lasting, high-quality developer by mixing a lot of water with a little Kodalith Liquid Developer.

The convenience is appealing. Kodak Dispenser Tubes are plugged in, highly concentrated solutions are drawn off

and mixed thoroughly with water. The Cubitainer is discarded when empty. (Crystallization or freezing at lower temperatures, by the way, need no longer be of concern.) Another darkroom convenience that is quite appealing is Kodak Rapid Fixer in Cubitainers. The two of them should keep many darkrooms running smoothly.

It looks like we're telling you that the right processing chemicals are just as important as exposing the right film. And they are! We want you to get your money's worth from the Kodak films and plates you buy.

We haven't said anything about the package sizes of these chemicals. This sort of information we leave up to your Kodak Graphic Reproduction Dealer, who is ready to help you with such things. See him also for our continuous-tone developers, stop baths, safelights, and other equipment and chemicals we offer the graphic arts.

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25 Years Ago

DECEMBER, 1936 — The Christmas issue noted that "with the passing of the dark days and the coming of a better business day, we should all have much for which we can be thankful." . . . An Eastern lithographer's price list indicated that he would lithograph 1,000 four-page forms, 8½ x 11" for \$20.30, black ink on sulphite bond.

Howard Ketchum wrote about the influence of color on marketing, pointing out that "knowing

what colors the public is susceptible to permits smaller inventories." Other claims for color were made in an article by Albert E. Haase, who said that "many sales appeals are fulfilled by color." IPI, pursuing a vigorous campaign on color education, announced an essay contest for printing students on the subject "The Importance of Color in Printing."

SITUATIONS WANTED — "Composition—Two-thirder in printing plant. Young man desires position in lithographic industry. Start \$15 a week."

10 Years Ago

DECEMBER, 1951 — Lord Baltimore Press had everything in operation in its new \$2 million plant in Baltimore. Advance planning for the expansion required four years, including market surveys, engineering studies, analyses of other plants and designing.

LTF described its new recording densitometer at the annual research meeting of the Foundation in Chicago. Considerable interest was shown in the new LTF aluminum-copper bi-metal plate . . . How metal signs are lithographed was the subject of an article about Donaldson Art Sign Co., Covington, Ky.

LNA announced plans for its second Lithographic Awards Competition, for lithographic work in 42 classifications . . . The U. S. Department of State asked the industry to assist in assembling a poster exhibit for counter-propaganda purposes in Europe and the Middle East.

The penny post card passed into history as new postal rates went into effect. Similar rate hikes were made on second and third class mail. Meyercord Co., Chicago, honored 77 members of its Quarter Century Club.

5 Years Ago

DECEMBER, 1956—An editorial commented that the letterpress industry's announcement of a proposed research program, patterned after the LTF, gave the Foundation the chance to enjoy the truth of the old proverb, "Imitation is the sincerest form of flattery." . . .

George A. Mattson, formerly with the Chicago Lithographers Association and LNA, joined Printing Industry of America . . .

A. L. Tucker was elected president of Sauls Lithograph Co., Inc., Washington, D. C.

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NL=Night Letter
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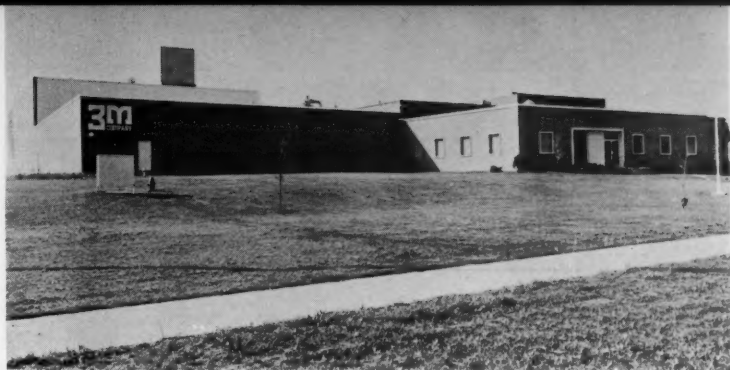
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New 3-M plant (left) at Middleway, W. Va. Workmen fasten the 3-M trademark (right) to front of plant as W. L. Petersen watches.

3-M Opens Printing Products Plant

MINNESOTA Mining and Manufacturing Co. dedicated a new printing products plant at Middleway, W. Va., November 27, with James Harrison, Pubic Printer of the United States, participating at the ribbon-cutting ceremony and delivering the featured address at a luncheon at Harper's Ferry, W. Va., which followed. The new plant is 3M's second printing products plant. Until now all production facilities have been located at 3M's Chemolite plant near St. Paul. The availability of a second source of supply for 3M printing products now affords protection to customers whose own operations might be impaired by an interruption of production at the Chemolite plant, such as might result from a disaster of some kind. The Middleway location will also provide better and faster service to 3M's many printing products customers in eastern markets.

Reasons for selecting Middleway as the site of the new plant were ready access to major eastern markets, the availability of a good supply of pure water and unpolluted air in the area (both being of exceptional importance

in production of presensitized plates) an excellent labor supply and good industrial climate, and good potential for future expansion. The original owner of the site was Varel Mills who operated a woolen mill. Minnesota Mining purchased their plant and 270 acres of land late in 1959 and started construction of a major addition to the previous plant which has approximately doubled the size. The plant went into production early last summer, and now employs about 70 people. W. L. Petersen is plant manager and James R. McClintick is production manager.

Design and construction were under the supervision of Cyril P. Pesek, corporate vice-president in charge of engineering and staff manufacturing. There were particular problems in construction of the Middleway plant, because presensitized lithographic plates, the major product made at the plant, can be manufactured to meet 3M's quality control standards only in an atmosphere completely free of dust, with temperature and humidity controlled within close limits at all times regardless of outside weather.

Thus the design of the air conditioning and filtration systems was highly critical. Also, walls, floors and ceilings were built of special materials so that it would be possible to maintain an essentially dust-free atmosphere at all times. In addition, special lighting fixtures were installed in the manufacturing areas, because the plates being produced are highly light-sensitive.

At the plant dedication advance announcement was made of a new photo-offset plate especially designed for short run requirements. The new Type E plate is a one-sided paper plastic aluminum laminate which, according to 3M, is the only plate on the market with a metal surface and offering all the benefits of a metal plate at low cost. It has been designed to give increased production on the press, superior quality and built-in consistency, but at a considerable cost reduction. A presensitized, aluminum foil, Type E is a negative acting plate which is processed with a single step. It is extremely fast, simple to make and has great flexibility.

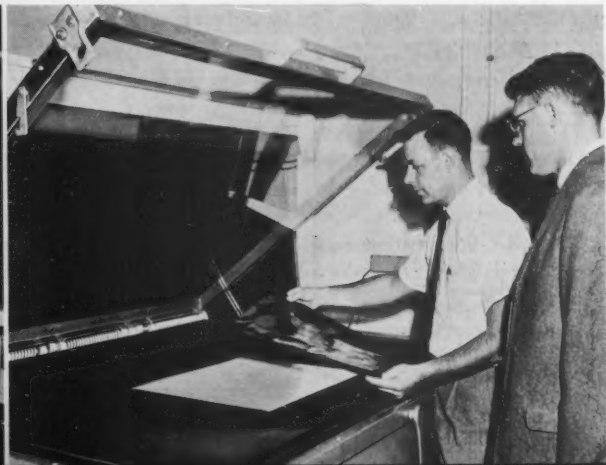
Present at the plant dedication were a group of 3M executives headed by the company president, Herbert P. Buetow. West Virginia guests included State Senator Clarence Martin and Rep. Harley O. Staggers.

(Continued on Page 72)

Temperature and humidity controls in the offset plate converting room (left) are checked by Alfred Schmit, maintenance super-



intendent at the plant. Preparing to expose 3M photo offset plate (right) is David Sibole. At right is supervisor Glen Wallace.



TECHNICAL SECTION

Valuable for MICR work:

Ink Film Thickness Gauge

By **MIKE GEARY**
Washington Correspondent

WHEN the Bank Management Commission of the American Bankers Association published a supplement to its final specifications and guides for mechanized check handling, just two years ago, many banks not already in the process of change-over, took another look; noted the results reported on MICR; and the rush to this new time, manpower and economic advantage continued to grow until the MICR, abbreviation of Magnetic Ink Character Recognition, became known in many public relations suites as the most publicized short-form identity since FDR.

The MICR story, as it affected one of the largest banking establishments in the world, is told by Everett B. Kennedy, assistant vice president, Chase Manhattan Bank; in collaboration with Alexander Quaglierello, the bank's supervisor of check imprinting, in a recently published 16-page presentation to bankers.

That all banks and banking systems had not taken "The Common Machine Language for Mechanized Check Handling", or sub-title, "Final Specifications and Guides — to Implement the Program", as seriously as those at Chase Manhattan, was one conclusion that might be drawn from the final page. And, there might have been those, who for some reason, had decided to do a little implementing on their own; in spite of the ABA following in the printing trades as well as the captive bank shops. If such non-conformity did exist, it was surely not in accord with the Chase stand on ABA Specifications. The principal author ended his informative brochure with, "Bankers must insist that bank stationers and anyone else in this field, must meet the ABA specifications; if we are to have a common language. If we assume an attitude of indifference, we will only be sabotaging our automatic accounting systems".

This final point taken by Mr. Kennedy has proved its self on many occasions, when introduction of inconsistencies into controlled programming, has resulted only in expense and waste.

The ABA Specification Booklet No. 147, a less objective-sounding title than the other two mentioned, but

nevertheless the same publication, has been well accepted throughout the industry where MICR programs are in operation. With those not directly connected with the program, it has been difficult at times to keep abreast of the multitude of association, manufacturer, supplier and trade journal publications and specifications on the subject. However, printers and lithographers, who by choice or otherwise, have undertaken magnetic imprinting have learned swiftly of the accuracy requirements, signal level testers, magnifiers and projection inspectors and other precision devices, used to provide services when printing magnetic inks. Although different magnetic inks may require different thicknesses in order to render proper signal, once this thickness is determined it must be maintained throughout the press run.

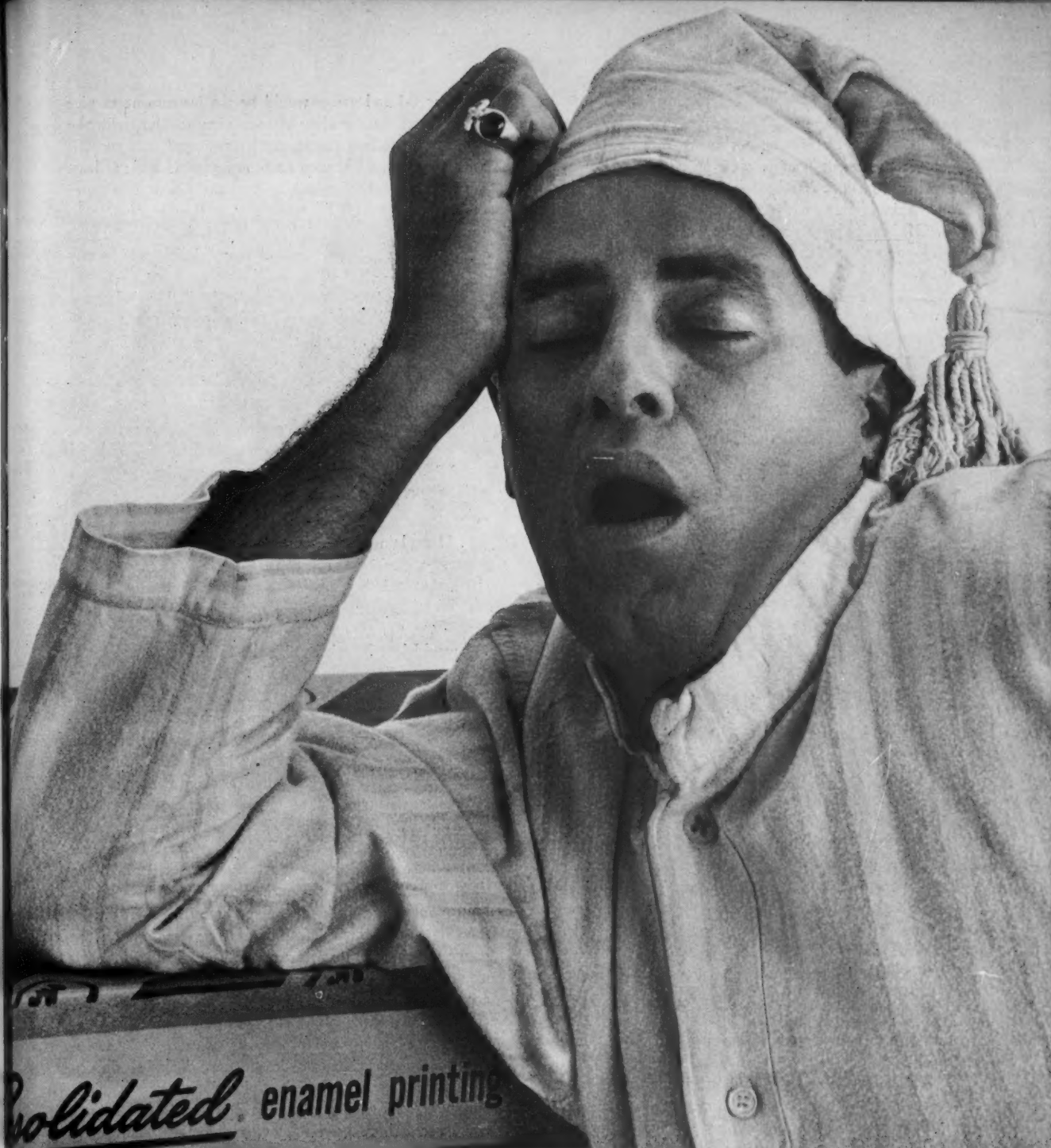
Whether it be ABA, or any other set of standards, the improper thickness of ink on the printed sheet, seriously affects production and causes rejections or incorrect identification in machine sorting. Once the magnetic ink has been correctly compounded and loaded into the ink fountain, the pressman should perform frequent checks to insure that the thickness of ink on the rollers is in correct relation to the ink which is to appear on the printed sheet.

MICR Inks Generally 0-2 Mils

THE thicknesses for inks used in MICR programs are generally to be found within the 0-2 mils range and seldom below 0.4-0.6 mil. In order to check the thickness of wet ink film on ink rollers, a precise measuring instrument must be employed.

Among the supply firms concerned with the mechanics of critical ink measurements, is Gardner Laboratory, Inc., Bethesda, Md., which produces the Interchemical Wet Film Thickness Gage.

Among the many physical testing instruments and equipment, developed or manufactured by this firm, is a series of nine wet film thickness gauges, with full scale calibration ranges from 0-0.4 mil upwards to a gauge



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for measuring 50-90 mils. (One instrument measures from 0-100 microns.) The gauges were developed by Interchemical Corporation, to incorporate the features of direct instrument reading with no adjustment or recalibration. Gardner Lab holds exclusive manufacturing and marketing rights on the device.

Of the nine gauges available, two are directly applicable to lithography and letterpress, including MICR and other printing procedures requiring critical measurement of wet ink film: the GG-6280B gage, with full-scale calibration



Taking a reading with the Ink Film Thickness Gauge

from 0 to 1 mil, and the GG-6280 gauge, which takes measurements in the 0-2 mils range.

Henry A. Gardner, Jr., president of the company explained that "the guaranteed 2 percent accuracy of the calibration marks, refers to the actual gauge clearance at these marks, and not to measurement of ink film thickness. Thus, in applying this percentage to the 0-1 mil and 0-2 mils gauges, which are used in lithography, the 2 percent figure would allow for tolerances of ± 0.02 mil on the 0-1 mil gauge; and tolerances of ± 0.04 mil on the 0-2 mils gauge."

"Because the greatest accuracy usually is needed at the lowest film thickness, these very narrow tolerances are supplied only in those gauges intended for use on very thin films such as printing inks and other thin coatings," he added.

Dr. Mark Westgate, consultant at Gardner Lab, gave further details on specific measurement ranges and ink thicknesses: "We have found that a number of factors are responsible for the reports we receive from the field concerning the many variables to be considered before a specific thickness of ink, or a specific gauge can be declared most appropriate for a certain program or a certain type of equipment. First of course, is the signal strength requirements of the inks and the fact that thickness varies considerably with the various inks used. LTF reported to us that tests with magnetic inks from about 20 manufacturers showed a variation of 0.8 mil to 1.6 mils of thickness necessary for proper signal strength. Of three letterpress inks tested at 0.5, 0.5-0.7 and 0.6-0.8

mil, our 0-1 mil gauge would be the instrument to give the most accurate reading of measurement. But, with the litho magnetic inks tested, results indicated that the 0-2 mils gauge should be used on litho magnetic inks; at least until these thicknesses can be brought down to a more desirable range. LTF reported that they were able to run film thicknesses of 1.0 to 1.3 mils — without undue filing of the characters; with careful ink and water balance on the press."

"In considering the variables further", Dr. Westgate continued, "we find in our MICR reports that there is a difference between offset and letterpress; that identical equipment in two different shops will often render two entirely different findings; and frequently we learn that no two pressmen will get identical results from the same press. But, a lot must be left to the pressman in the selection of a proper gauge; because he knows the signal strength requirements and the limitations he can obtain with his press."

Selecting a Gauge

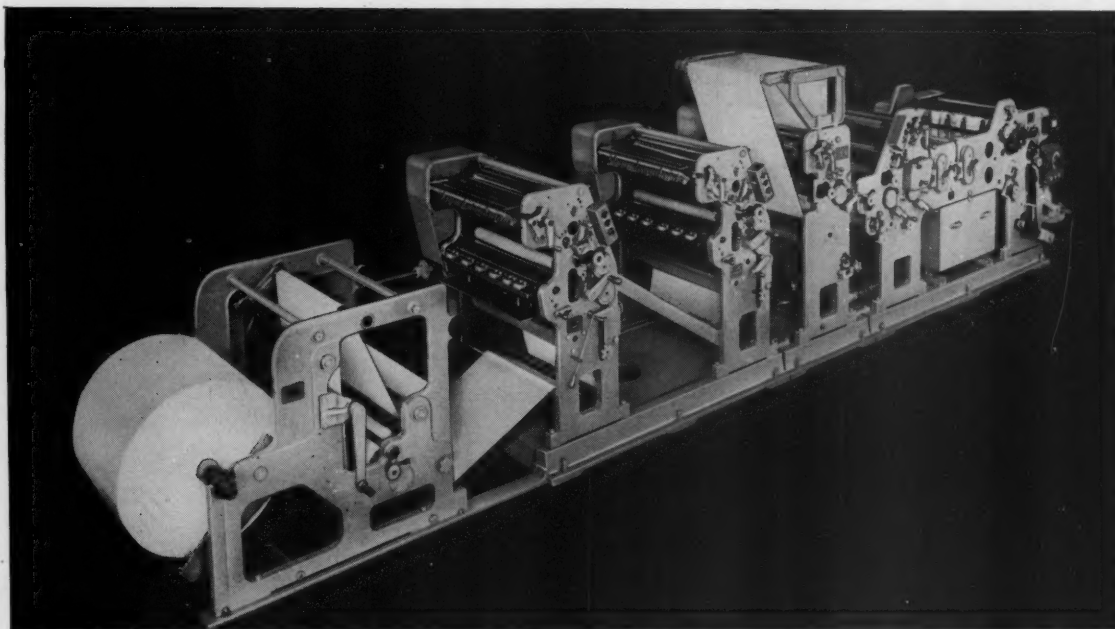
TO explain the recommended method for selecting a gauge for measuring ink thickness Dr. Westgate emphasized that the best results are always obtained when measurements are taken from the center of the scale calibration on the gauge. Therefore, a thickness reading of .05 would best be taken with the 0-1 mil gauge, because this measurement is located near the center of that gauge but at the lower end of the 0-2 mils range gauge.

The Interchemical Wet Film Thickness Gauge is described by the Gardner firm as essentially an eccentric wheel. Precise measurements may be taken as accurately from the curved offset ink roller, as from a flat glass or smooth metal surface. The inner eccentric wheel is supported by two outer concentric wheels. During the rotation of the eccentric wheel, the greatest depth of the wet film will be picked up by contact and marked plainly in view. The engraved graduations indicate the depth of the coating over which the gauge has rolled, immediately showing the thickness of the ink. The readings on the gauge are as accurate as are possibly obtainable, in using manual methods to determine wet film measurement, according to Gardner.

Not new to lithography are the problems of thickness, correct breakdown, and proper distribution of inks. Innovations during the past decade have included the introduction of plastics to inks, ink rollers, press blankets and plates. Few changeovers to accommodate a specific new process have been without problems of their own. Yet, demands from the consumer for increased accuracy and versatility have failed to slow the phenomenal progress in the industry.

The MICR program has not been without its share of growing pains and problems; correct ink thickness being a significant example. Although LTF and others have conducted research into the matter, they have yet to present a table of recommended ink thicknesses for the program — and manufacturers of magnetic inks are still being looked to for magnetic litho inks of lesser thicknesses which will nevertheless give the proper signal. ■

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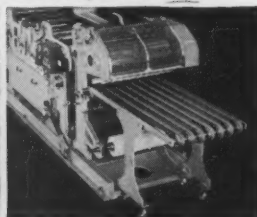
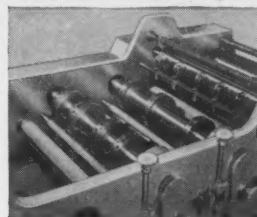
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Photography, Tone & Color Correction

CLEANING CONTACT SCREENS. 655.302 Herbert P. Paschel. *Modern Lithography* 29, No. 2, February 1961, pages 59, 123 (2 pages). In answer to a request, author gives precautions on handling and cleaning contact screens. The suggestions on cleaning are based on the type of soiling involved.

COLOR NEGATIVE MASKING. 655.302 A. Matheson. *The Litho-Printer* 4, No. 2, February 1961, pp. 95-98 (4 pages). The color negative-positive is growing in popularity with photographers due to its flexibility and scope for control. The color negative can serve as a source of separation positives for photomechanical reproduction. In this it can save several steps in halftone production. Masking is still necessary because of the deficiencies in printing ink colors. This masking differs from that for positive transparencies due to: 1. Lower contrast of negative. 2. Differences in colors which are not true complementaries. 3. Integral masks in negatives. Halftone positives are arrived at via a continuous tone separation positive, or by direct screening. These are described and their merits compared. Attempts to accomplish the desired result by other means,

such as the Agfa Kom-bi and Gevaert Multi-Mask films and LogEtronic electronic method, are described briefly. 2 Illustrations.

IMPROVEMENTS IN TRANSPARENCY MASKING. 655.302 John M. Lupo, Jr. *Modern Lithography* 29, No. 2, February 1961, pp. 53-54, 123 (3 pages). The three basic procedures of 1. Contact Masking; 2. Camera Back Masking; 3. Two Stage Masking are explained briefly. The new Multimask film for masking purposes is described briefly. 4 References.

THE UNIVERSAL CONTACT SCREEN. 655.302 F. G. Wallis. *The Litho-Printer* 4, No. 2, February 1961, pp. 69-70 (2 pages). The contact screen has been much used by lithographers and is now attracting the attention of photoengravers since it fits the powderless etching technique. It has been available in magenta and gray, both adapted for either lithography or photoengraving. A new screen is described in which dots, instead of being arranged in "checkerboard" pattern are in line without intermediate clear areas. The differences in patterns of the two types of screens are illustrated. The screen is neutral in color, is suitable for litho or photoengraving, needs no flash exposure.

PASTING UP CAMERA COPY — Second of a Series on Copy Preparation. 655.303 Charles C. Ball. *The Graphic Arts Monthly* 33, No. 2, February 1961, pp. 68, 70, 72-74 (5 pages). If the paste-up is prepared by the layout artist, the camera man knows if it is ready to shoot. The making of a paste-up is gone through step-by-step with full explanation. 4 Illustrations.

WHAT IS FOG? 771.534 Herbert P. Paschel. *Modern Lithography* 29, No. 3, March 1961, pp. 58-59, 139 (3 pages). Fog is unwanted silver density, not part of the photographic image. It can take 3 forms: 1. Basic or inherent fog, 2. Chemical or processing fog, 3. Light or optical fog. Each is discussed and causes and remedies given.

THE CONTACT SCREEN STORY (Part 1). 655.302 Frank H. Smith. *The Lithographer and Offset Printer*, Vol. 57, No. 2, February 1961, pp. 11-13 (3 pages). The idea for a contact screen goes back into the last century. The first commercial screens were made around 1926. The Kodak dye image contact screens were first made in 1941. The control of contrast with the orange screen is explained. 2 diagrams.

THE CONTACT SCREEN STORY (Part 2). 655.302 Frank H. Smith. *The Lithographer and Offset Printer*, Vol. 57, No. 3, March 1961, pp. 15-18 (4 pages). Perhaps the most successful screens are the Kodak magenta type. They give more detail than the conventional cross-line screen. Contrast may be controlled with filters. Gray screens are necessary for filter work in color separation and their use is explained. Other screens described are the negative and positive and universal screens.

HIGHLIGHT AND DROPOUT AND HALFTONE TECHNIQUES (Part I). 655.302 Herbert P. Paschel. *Reproduction Methods* 1, No. 1, March-April 1961, pp. 24-30, 60, 61 (9 pages). Printing processes, including offset duplicating, impose limitations on the tone scale that can be reproduced. Much of the loss is at the highlight end of the scale. A variety of "highlight" or "dropout" techniques have evolved to help. Equipment involved is discussed briefly. The methods covered in this installment are: multiple aperture system used with glass screens; aperture or screen manipulation which by controlled dot displacement veils over the highlight slots of the negative; use of non circular diaphragm openings; use of highlight masking (with glass and contact screens). Certain indirect methods not concerned with the screening of the negative involve the use of special films which accentuate highlight contrast, the Velox method and

the Logetronics control method which accentuate the highlights in the original copy. In summary, the highlight mask method is recommended as giving the best, most consistent results. 16 illus.

WHAT THE LITHOGRAPHER SHOULD KNOW ABOUT COLOR TRENDS. 152.1 Faber Birren. *Modern Lithography* 29, No. 3, March 1961, pp. 32-33, 135, 137 (4 pages). Color has become an economic force with a tremendous potential in packaging. Color holds at least a 50 percent advantage over black and white. Printing inks are important in this. Preferences in colors and their strength tend to change over the years. These changes are discussed and shown in 2 charts.

Planographic Printing Processes

pH DON'T RUN IT DOWN. 655.326 William E. Yochheim. *National Lithographer* 68, No. 2, February 1961, pp. 34, 35, 48 (3 pages). Understanding and control of pH of dampening fountain solutions can lessen plate, ink, drying and set-off problems, and are important to continued good press performance. The solution, a "dilute acid" is explained and the effects of various pH levels pointed out: low pH, more acid, more attack on plates, non-image areas become more sensitive, scumming starts, etc. Suggested levels for pH for various jobs are given.

duPONT REPORTS CRONAFLEX FILM AS PRESS PLATE. 655.325 Anon. *Modern Lithography* 29, No. 3, March 1961, p. 115 (1 page). Announcement of a method of preparing an offset plate using the film which is fast enough for projection printing, produces a plate in 10 minutes and runs 5,000 or more top quality prints.

NEW PROCESS FOR BLACK-AND-WHITE LITHOGRAPHY. 655.302 Anon. *The Inland and American Printer and Lithographer* 146, No. 6, March 1961, pp. 69, 72, 142 (3 pages). Brief description of a method of getting a full scale reproduction of photographic originals as developed by J. Tom Morgan of the Litho-Krome Company of Columbus, Georgia. Two plates are used, one for the lower tone value, one for the higher, both printed in black ink on a two-color press. Scale runs from the white of the paper to solid black ink. Densitometer control is used. Two examples printed on a cast coated paper are included. (6 other illustrations).

Paper and Ink

METHOD AND APPARATUS FOR AUTOMATIC TEMPERATURE CONTROL OF ROTARY PRINTING PRESS INK ROLLERS. 655.307 George H. Shindler. (U. S. Patent 2,971,460 — Application March 30, 1959). *Official Gazette* 763,

No. 2, February 14, 1961, p. 336. The method herein described of heating ink in a rotary, web-fed printing press, wherein the web is subjected to heating for drying of the ink thereon, which method consists in passing a liquid coolant through a device for cooling the web after its passage through the dryer, circulating said liquid coolant so heated in heat transfer relationship to the ink before its application to the web in the printing operation, and regulating the temperature of the heated coolant by mixture therewith of unheated coolant before it comes into heat transfer relationship with the ink to be heated thereby.

A NEW BOOK PAPER IS BORN. 676.2 Burton L. Stratton. *New England Printer and Lithographer* 24, No. 2, February 1961, pp. 58-59 (2 pages). Harvard University Press and S. D. Warren Co. join in developing a special paper meeting 12 specific standards. Briefly, these are: 1. Two finishes — letterpress and offset, 2. Cost between commonly used and top quality papers, 3. Life expectancy over 300 years, 4. Good opacity, 5. 55 to 60 lb. basis weight range, 6. Bulk specified, 7. Physical properties good, 8. Color specified and controlled, 9. Eggshell finish, 10. Watermarked, 11. Available in 10,000 lb. or greater lots. Named University Text. Story told briefly. 2 illus.

COATED WEB-OFFSET STOCK BLISTERS. 655.329 Charles W. Latham. *The Inland and American Printer and Lithographer*, Vol. 146, No. 5, February 1961, p. 62. Answer to a question about oven temperature to avoid blistering. Causes independent of oven are first discussed: weak coating or too tacky ink. Blistering in the oven is caused by moisture in the paper flashing into steam too rapidly. Ways of controlling this situation are given.

PAPER FOR WEB-OFFSET. 655.326 : 655.329 William H. Bureau. *The Graphic Arts Monthly* 33, No. 3, March 1961, pp. 110, 13, 14, 16 (4 pages). Rolls must be properly wound at the mill. Storing rolls on end on a damp floor can cause trouble. Various forms of pressure can deform rolls. Splices, cores, slime spots and other defects, effect of weight on yardage, roll diameters are all discussed. Papers used range from newsprint to heavy enamels. With coated papers, blistering in the dryer can be a problem. Papers for web-offset must meet normal lithographic requirements plus others imposed by web operation.

'MM' PROS AND CONS. 676.27 Anon. *Printing Magazine and the Offset Printer*, Vol. 85, No. 3, March 1961, pp. 60-61 (2 pages). A parallel listing. Sample pros: easy for all to understand; cuts training time for new people; already in use in

paperboard industry. Sample cons: increase costs to mills, labels become obsolete, old employees retrained; double identification of orders; tends to destroy classifications of papers; confusion at all levels; present size standards have meaning for papers to which they are applied.

Lithography — General

SNAKED-OUT AREA SCUMMING PREVENTION. 655.326 Eugene C. Bulinski. *The Graphic Arts Monthly* 33, No. 2, February 1961, pp. 130, 32, 34 (3 pages). The technique of polishing unwanted image off a plate with special abrasives is first described. Sometimes such areas later scum on the press. This can be because the plate area so treated is too smooth. Techniques for local hand re-graining and etching are given.

OFFSET FOR SMALL-TOWN NEWSPAPERS. 655.329 : 655.5 Anon. *Modern Lithography*, Vol. 29, No. 2, February 1961, pp. 28-9 (2 pages). Some reasons given for trend to offset are: 1. Quality, 2. Can use more photos and art, 3. Presensitized plates, 4. Presses available, 5. Speeds, particularly with web. Statistics are given from a survey by *American Press* showing present and planned distribution of presses by types. "The future lies in offset" according to one publisher. 2 tables.

WHERE YOUR LTF DOLLARS GO. 655.07 John L. Kronenberg. (From a talk presented at the 28th annual convention of the National Association of Photo-Lithographers, Chicago) *Modern Lithography*, Vol. 29, No. 2, February 1961, pp. 42-3, 123, 125 (4 pages). A summary of the financial position of the Lithographic Technical Foundation showing that due to the endowment, owned buildings and equipment and loaned equipment, research value is 50 percent above the yearly income from dues. Some of the research and training activities are described briefly.

HOW TO AVOID STREAKS. 655.328 Charles W. Latham. *The Inland and American Printer and Lithographer*, Vol. 146, No. 5, February 1961, pp. 60-62 (3 pages). A number of causes are discussed. Slippage because of smoothness of plate and/or paper or ink; type of work being run; roller conditions; improper packing; improperly set bearers, etc. are explained. A severe test for the condition of the press with regard to tendencies to streak is given. 2 diagrams.

THE HISTORICAL BACKGROUND TO LITHOGRAPHY. 655.1 : 655.32 B. W. Sansom. *The British Printer* 74, No. 2, February 1961, pp. 107-109 (3 pages). Describes briefly Senefelder's work with stone in 1796 and his efforts to make a re-



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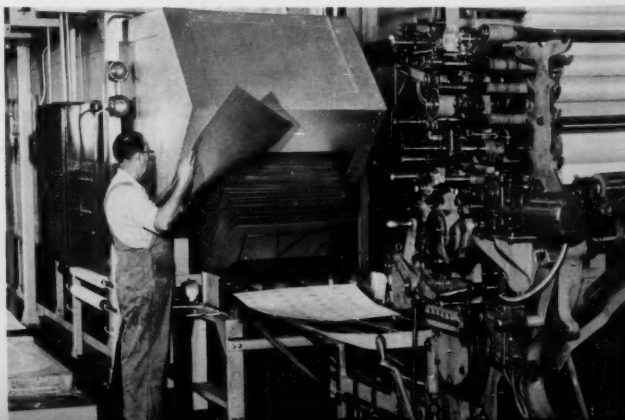


Presensitized aluminum plate being developed in Clark's transfer department.



This Clark craftsman inspects results with a flat-bed proof press.

One of Clark's veteran pressmen checks color balance and registration as the printed sheets move into the drying oven.





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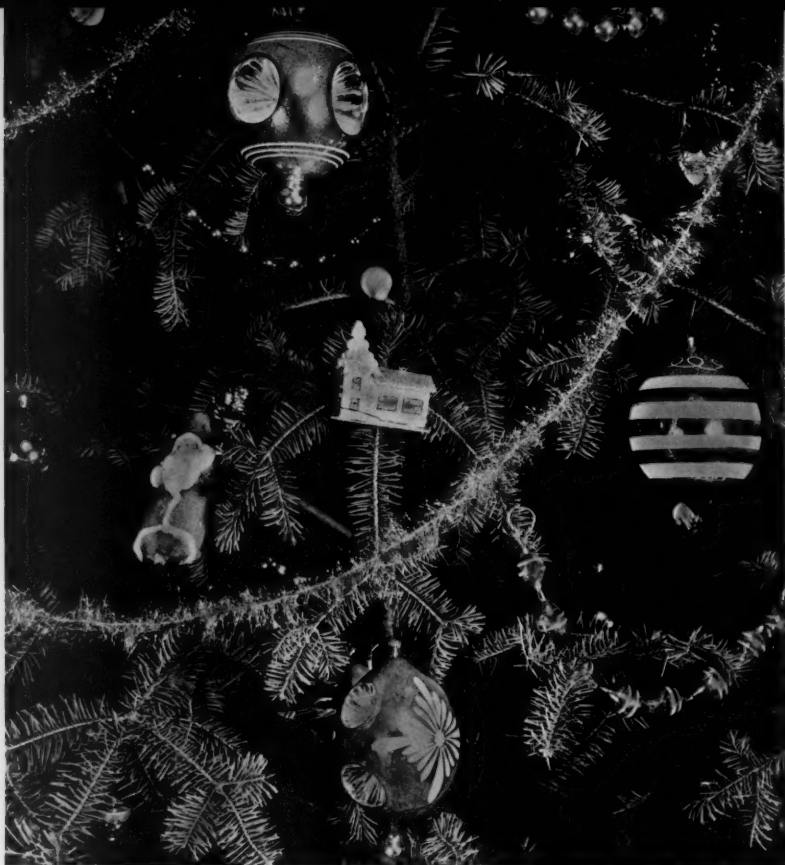


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Printing Papers

lief process with the stone. The use of color, texture and tints and power presses handling stones up to 40 x 60" are described. Efforts to use metal plates resulted in zinc and aluminum in the early part of this century. Offset was first used in metal decorating for some time before printing on paper. Later press developments include feeders, higher speeds, multi-color and web offset. Multi-metal plates and improvements in inks and papers are the latest developments in this industry with a bright future.

POSITIVE STRIPPING. (Part 11 — "Stripping for Profit"). 655.323 Elizabeth Parker. *National Lithographer* 68, No. 3, March 1961, pp. 43, 45 (2 pages). Positives are used for printing certain kinds of plates. The differences from the more usual stripping of negatives are pointed out and precautions given.

SURVEY OF DAMPENERS. 655.328 John M. Lupo, Jr. *Modern Lithography* 29, No. 3, March 1961, pp. 47-48, 131, 133 (4 pages). Dampening systems are classified as: 1. the contact type (the conventional system which dates back to about 1884 and has changed little); 2. the indirect contact type (Dahlgren and others); 3. non-contact type (Mullen air-doctor system). A modification of the conventional system (GAE system) is described. It employs a variable speed fountain roller. 1 reference, 4 illustrations.

ARRANGEMENTS OF LITHO CAMERA-PLATEMAKING DEPARTMENTS. 655.32 : 655.02 Walter Wanielista. *Printing Production* 91, No. 6, March 1961, pp. 36-37, 126 (3 pages). Tips are given on layout based on the fact that each plant differs from another in size of plant, volume and anticipated growth. Ten basic planning steps are given for guidance which would serve to help an architect or engineer not too familiar with the operations involved. Three layouts are given and a fourth illustration shows light-tight entrances.

DRYERS FOR WEB-OFFSET PRESSES. 655.307 : 655.329 Ben Offen. *The Graphic Arts Monthly* 33, March 1961, pp. 86-88, 90, 92, 94, 98, 100 (9 pages). Dryers are required to get maximum quality, can be omitted if printing on newsprint or absorbent stock. Dryers mean sharper printing and freedom from restrictions on amount of ink laid, weight of stock or number of colors. Heat-set inks and the drying operation are described. Control, drying time, multiple web operation, speed of drying, paper waste, maintenance and chill rollers are among the further points discussed. 6 illustrations.

MCCALL OFFSET PRESS PROBABLY LARGEST. 655.329 Anon. *The American Pressman*, Vol. 71, No. 3, March

1961, pp. 31, 34 (2 pages). Brief story on a Levey press that is 108 feet long, 25 feet high and weighs about 700 tons. Two drums (one for each side) each about 5 feet in diameter, have five printing units on each and a drying cylinder for each side. Web speed is 2000 feet per minute, width 67¾ inches. Web length from rolls to slitter is about 470 feet. A schematic diagram shows the web lead.

Graphic Arts — General

THE INDUSTRY NOBODY KNOWS. 655 Donald Thrush. *Modern Lithography*, Vol. 29, No. 2, February 1961, page 33. The author believes the industry is misunderstood by outsiders; needs a "well financed national public relations program." He also believes that due to the increase in combination plants, the same tendency should be followed in management and research organizations in letterpress, offset and gravure by mergers.

SHOULD YOU MODERNIZE YOUR PRESENT PLANT? OR BUILD A NEW ONE? OR MOVE? 655.02 Roy P. Tyler. *The Inland and American Printer and Lithographer*, Vol. 146, No. 5, February 1961, p. 47. Some basic principles governing these decisions are given and discussed. They are briefly: 1. Convenience to sources, 2. Convenience to customers, etc., 3. Likelihood of floods, fires, etc., 4. Reliable and adequate utilities, 5. Transportation for freight and personnel, 6. Tax rates, 7. Neighborhood improving? 8. Return on assets for the alternate decision.

TYPESETTING TAKES TOO MUCH TIME. 655.28 Frank DeWitt. *Printing Production* 91, No. 5, February 1961, pp. 44-45, 108-109 (4 pages). Typesetting is repetitive and too much based on old technology. Author suggests that the remedy is to so plan that copy is typed or keyboarded only once, that automatic operation takes over from there. Suggested methods are: Use IBM Key punch and let cards control from there on; type on a Flexowriter and get a perforated tape, etc. Methods of handling corrections are suggested. A flow chart for typesetting from author to printing surface is offered.

HOW TO CHOOSE AN IMPOSITION. 655.313 David Kass. *Book Production*, February 1961, pp. 41-43 (3 pages). The correct choice may mean the difference between profit and loss on a job. An example is used to explain the fine points of the choice in relation to trim and what is near the edges, type of stitching, location of gripper edge, etc. 5 illustrations in line.

BUILDING PROGRESS IN THE GRAPHIC ARTS INDUSTRY. 655.02 Anon. *Printing Production* 91, No. 6, March 1961, pp. 43-64 (22 pages). A 22 page section is devoted to short articles

on 25 different printing plants and trade shops covering a wide range of size of operation. Some of the projects covered include arranging equipment, workflow routes, departmental locations, plant expansion, how to plan, lighting and flooring, air conditioning and humidifying, modernization, building dimensions, new equipment, materials handling, and renovating old buildings. 17 floor plans are among the 50 illustrations.

HANDLING PAPER IN THE SHOP. 655.306 Frank Arbolino. *Modern Lithography* 29, No. 3, March 1961, pp. 55, 137 (2 pages). Specific tips on the subject such as: allow paper 3 or 4 days to condition to pressroom atmosphere and temperature; applying heat to paper locally in the feeder to correct unevenness. Some suggestions were given on a picking and fuzzing problem.

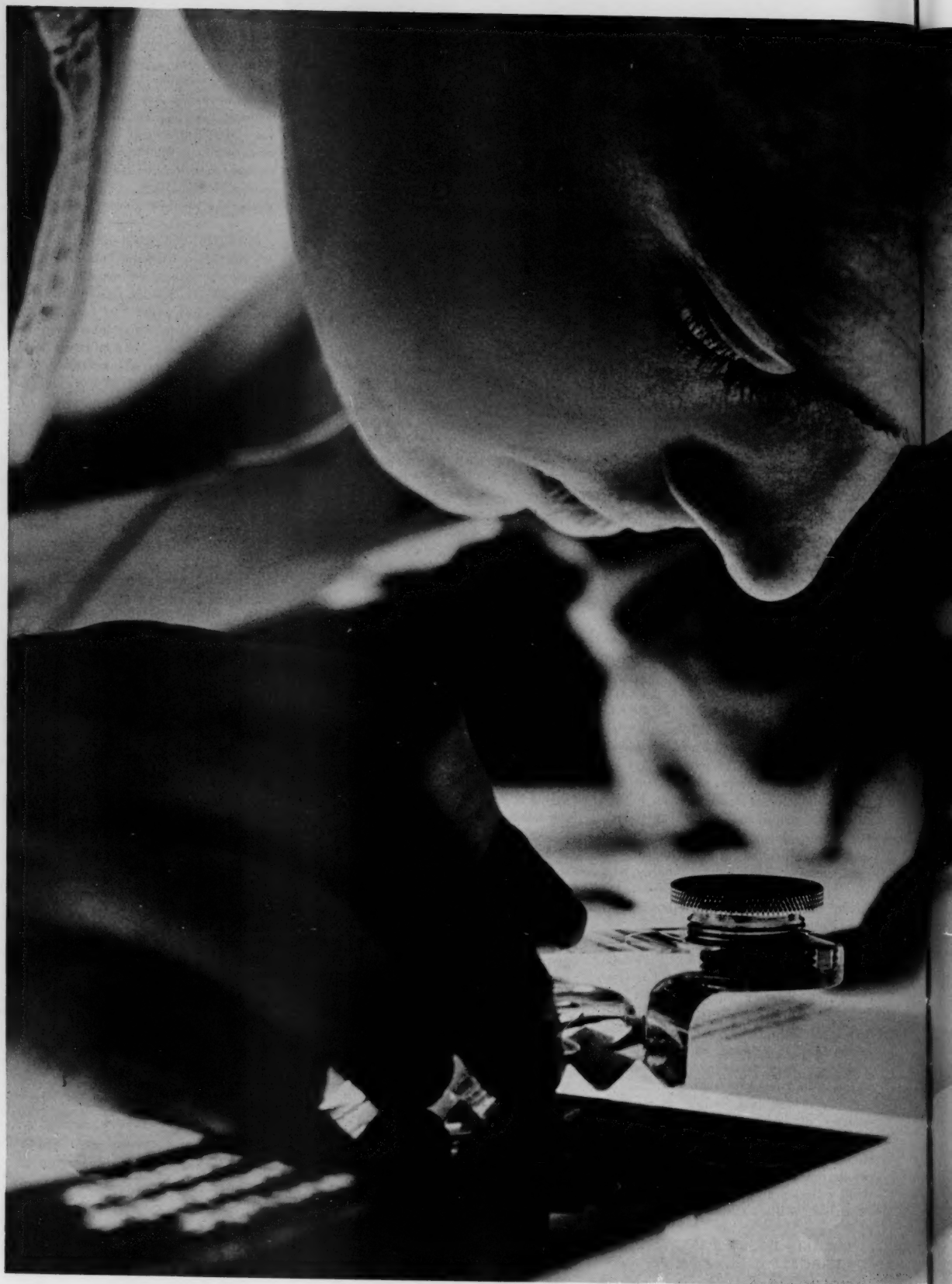
HOW DO WE PRINT TOMORROW? 655.306 Ronald I. Drake. *The Inland and American Printer and Lithographer* 146, No. 6, March 1961, pp. 54-55, 138, 141 (4 pages). Some parallel history of papermaking and printing is given and the acceleration of the rate of progress noted. In the last 10 years, instrumentation and automation in printing while in papermaking on-machine coating and improvement of paper to fit specific printing needs has been outstanding. Cast-coated papers and recent growth in web-offset are cited also. Some of the paper problems of web-offset are discussed. For the future, the author predicts one paper will be suitable for all processes, (letterpress and offset inks more liquid and less tacky will help in this), papers will be level, smooth, glossy and ink receptive. Other predictions involve new papermaking materials, phototypesetting and electronic printing.

Allen, Lane & Scott Sold

Security-Columbia Banknote Co. announced November 17 that it will purchase Allen, Lane & Scott, Philadelphia printers and lithographers.

Fred R. Esty, president of Security-Columbian, said his firm plans to operate Allen, Lane & Scott under its present name and at its present plant. In addition, all employees will be retained. Wallace Scott, Jr., is president of the firm.

Security-Columbian, which prints stock certificates, bonds, foreign currencies and stamps, will take over Allen, Lane & Scott this month. The purchased firm has specialized in financial and commercial printing for 90 years.





CRONAR

Litho films . . .

stable, consistent,

"proven in use"

For camera halftones, line negatives, contact positives, color corrector masks—any process requiring a superior litho film, you know you're safe with a CRONAR Litho Film.

CRONAR Litho Films are extremely high contrast, ortho films with non-halation backings that insure maximum image sharpness, and clear completely during processing. They were the first graphic arts films on polyester base . . . and they've proven their superiority in leading shops throughout the world.

You can be sure there's a CRONAR litho film that will work efficiently for you. For more information ask your Du Pont Photo Products Technical Representative or your Graphic Arts Dealer.

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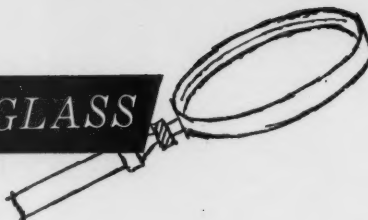
E. I. du Pont de Nemours & Co. (Inc.)
Photo Products Department
Wilmington 98, Delaware

⬠ Symbol and CRONAR are Du Pont trademarks for polyester graphic arts films.



Better Things for Better Living
... through Chemistry

THROUGH the GLASS



Fewer Pretty Girls

SOME time ago ML commented editorially on the need for careful planning of exhibition displays to make them attractive and stimulating to passing lithographers. Now comes an interesting report from the New York firm of Clapp & Poliak which confirms many of our views and offers additional suggestions worth mentioning here. It might be well, at the outset, to note that the company is one of the largest producers of industrial shows in the U. S. and so, presumably, knows what it is talking about.

Asked by exhibitors just what visitors want at a show — lots of products, pretty girls or technical displays? — C & P decided to do a study of the situation and came up with the following things which most visitors want at a show, with some typical comments:

1. *Technically qualified booth personnel.* "I was irritated, after coming 2,000 miles for information, to find many exhibitors with salesmen in attendance who could not give me the technical data desired."

2. *Alert and well-trained people.* "Booth personnel should be given an indoctrination course on meeting the public. Frequently, the booth personnel were tired or made a poor impression although technically qualified to make a presentation."

3. *Less high pressure selling.* "An appalling lack of basic product information. Much too obvious product hawking. Certainly, the least interesting exhibits were those featuring one or two products and six men waiting to jump on anyone who strolled in."

4. *Fewer pretty girls.* "Suggest to the exhibitors that the platinum blonde female who has no knowledge of the product beyond the canned speech and who monopolizes the time and attention of the visitors adds little to the product presentation."

5. *Maximum number of products and their features.* "Despite the millions of dollars spent, I believe some of the manufacturers could have made their exhibits more interesting by having more of their products on hand and more working models, explaining certain design principles. Too many booths were taken up purely as advertisement and did not show anything different from what their sales catalogues or representatives have shown us before."

6. *Better technical literature.* "Exhibitors should be encouraged to distribute more engineering data such as dimensions, finishes, materials, etc. Too much of the literature is strictly propaganda."

7. *Newest products—and research and development activities.* "It appears some companies holding back

on their latest developments. It would be a big help if they realized how important new developments are to us."

8. *Exhibits that are convenient to study and understand.* "Found that many booths attempted to attract attention by color and girls, and get less attention than the practical, orderly displays."

All these points, and more, are included in a booklet entitled "What They Want," available free from Clapp & Poliak, Inc., 341 Madison Ave., New York 17. The C & P survey was conducted among design engineers, so some of these points may not be applicable to graphic arts shows. No matter what the field, however, it seems safe to say that the following statement in the booklet has pertinence:

"Do make sure your exhibit is a hard-working one — full of products, helpful facts, demonstrations, applications, and alert, trained personnel. The static exhibit will not do the same kind of effective job for you. And to be avoided at all cost is, for lack of a better word, the 'institutional' type of display in which the company and not its products holds center stage."■



IDEAS, TECH TIPS, HELPFUL HINTS, LATEST INFORMATION FOR PLATEMAKERS AND PRESSMEN

SHOP TALK

From the
Printing Products Division **3M**
COMPANY



Seems Like There's No End to Uses for New 3M Color-Key

Almost every day someone somewhere comes up with a new way to use 3M Brand Color-Key, the first negative-acting, pre-sensitized system for proofing color jobs. Here are a few you might want to try:

3M Color-Key can be used as progs on process work and will do a job that press progs can't.

3M Color-Key offers plants with single presses the advantage of a two-color press for printing duotones. The pressman can lay the second color over the first press sheets to visualize the finished job.

Here's proof 3M Color-Key can save money for you. One plant we know found an inaccurate color fit with Color-Key. They estimated they saved 10 hours press time and 4 plate makeovers. A brownline would not have shown the mistake.

Want to know more about how 3M Brand Color-Key can help you? Ask your 3M Representative to give you the full story.

New Film Shows How to Get a Harris Press "All Set to Print"

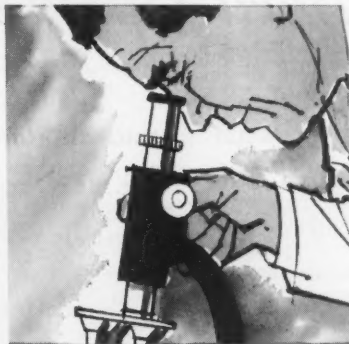
3M has just released a new 30-minute film that visualizes for pressmen the various settings required for Harris Offset Presses. Titled "All Set to Print," the film shows and tells in detail exactly what to do and how to do it. It is, as far as we know, the first visual documentation of the correct procedures for setting cylinders, rollers, and pressures—for checking out the press to make certain it will print properly with minimum problems.

"All Set to Print" is available to shops and trade groups now. For showings, contact your 3M Lithographic Supply Dealer, or your 3M Representative, or write the Printing Products Division, the 3M Company, 900 Bush Avenue, St. Paul 6, Minn.

Take a Close Look and See Why You'll Get Better Printing With Smooth Surface Plates...

Which is better—a grained plate or a smooth surface plate? You can start an argument in almost any shop with this one. But let's take a close look at some plate characteristics and see what are the differences between the two types of plates.

Put a grained wipe-on plate under a microscope. You'll see peaks of grain protruding through image areas and causing broken and irregular copy. Dots broken by grain impair printing quality, cause the image to sharpen up during a run. Valleys of grain between dots trap coating, keep background sensitive. This is the major cause of scumming, dirty running, and "touchy" plate conditions.



Now let's look at a grained zinc plate. Here, too, high peaks of grain distort and break up dots. Dot sharpening and loss often cause makeovers. Uneven grain takes an uneven amount of water or ink in some areas. This makes ink-water balance difficult, causes grayed areas and patchy printing. Deep valleys prevent complete background cleanout, the cause of scumming,

dirty running, and constant attention to the plate.

Put a smooth surface 3M Brand Plate under the same microscope. Only the natural smooth surface of the metal is visible. Dots are sharp and clean—not broken by peaks or valleys. The uniform lacquer coverage on the image is uniformly ink receptive for fast, complete roll-up. Background is clean and open; there is no tendency to run dirty or to scum. The smooth surface needs only minimum water. Tinting and scumming are greatly reduced.

It all adds up to the fact that "rough" grained plates are tough on pressmen. But smooth 3M Brand Plates are a pleasure to run—job after job.

Unusual Microphotos Reveal Why Grain Causes Problems

3M invites you to "Take a Close Look" at a grained aluminum plate magnified 120 times, a grained zinc plate magnified 120 times, and a 3M Brand Plate also magnified 120 times—to see for yourself why "rough" plates are tough on pressmen.

These unusual photographs have been carefully reproduced in a new folder that has just been made available. From these microphotographs it is easy to see why, in many press problems, grain is to blame for the trouble.

In addition to these remarkable photographs, there's a handy "Pressman's Trouble Chart" on the back of this new folder.

Every pressman, foreman, and shop owner should "Take a Close Look" at this new and revealing folder. For your copy, mail this coupon right away.

Minnesota Mining & Manufacturing Co., Printing Products Division,
Dept. PBI-121, 900 Bush Avenue, St. Paul 6, Minnesota

Please rush me a copy of your new folder "Take a Close Look".

NAME _____

TITLE _____

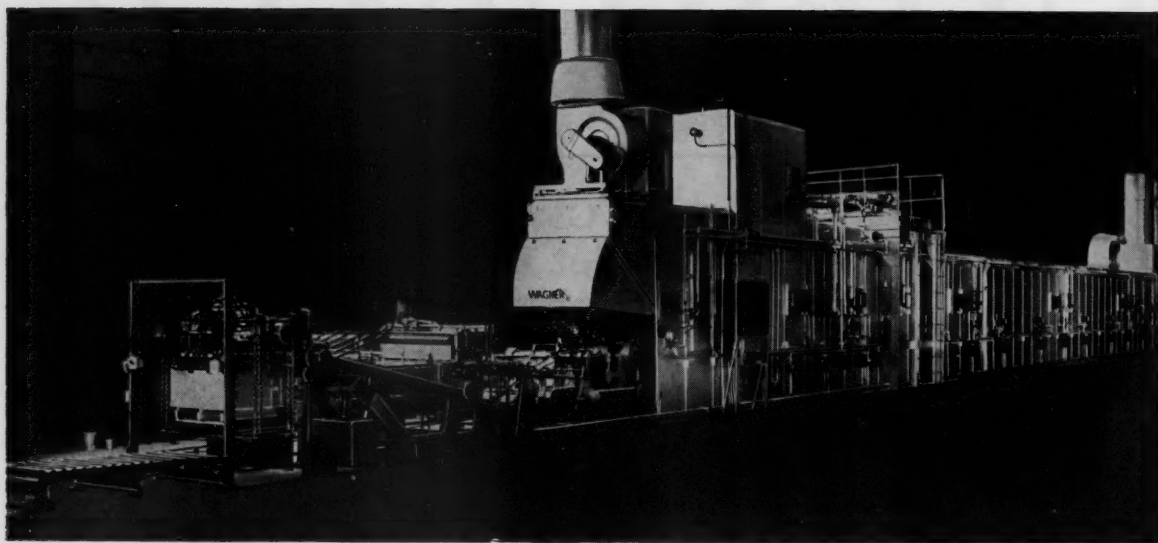
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The Wagner 1/6th D.E.F. Oven in a complete "Coater Line" for 100 sheets per minute.

We've Teamed-Up With Time!

To meet the demands of the Metal Decorator, for speeds up to 100 sheets per minute and thirty-four inches by thirty-six inches maximum sheet size, this Wagner Oven has been installed in many continents.

It has a Direct Externally Fired (D.E.F.) air heater and circulating blower for the first or come-up zone;

thus affording a rapid temperature rise. It is excellent for highly volatile materials.

The balance of the heating chamber is economically taken care of by the Wagner Rotary Air System.

There is no obligation for surveys and preliminary layouts.

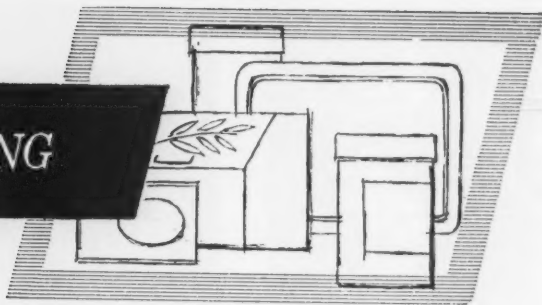
NATIONAL-STANDARD COMPANY

Wagner Litho Machinery Division

Secaucus, New Jersey



METAL DECORATING



NMDA members peer through glass shield to witness a drop going down in the cast house at Reynolds Metals Company's McCook plant. Second from the left is R. L. Singley, NMDA convention committee, who arranged tour.

What Decorators Do On Their Day Off...

WHAT do metal decorators do when they have a warm, sunny day off? They stick right to their business. At least, that is just what several hundred members of the National Metal Decorators Association did in October at their annual convention in Chicago. Three bus loads of decorators spent the afternoon of the second day of the convention in a visit to the McCook, Ill. plant of Reynolds Metals Co., seeing aluminum in various stages of preparation for metal decorating.

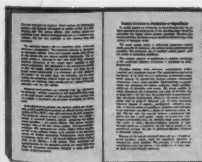
Three busloads of decorators at the sheet and plate works, one of the biggest of its kind in the world.



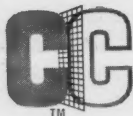
That odor you smell is money escaping!

The odorous fumes coming from your plant are probably costing you much more than the good will of your employees and neighbors. For these odors often represent a wasted asset . . . a missed opportunity to lower your costs . . . through conversion of fumes to BTU's for return to your ovens, use in other plant processes, or heating plant make-up air.

Thousands of installations . . . on ovens and dryers for wire enameling, paint baking, metal decorating, paper printing and impregnating, organic coating and curing, and many other purposes . . . have proven the economy and feasibility of using objectionable oven exhaust vapors as money-saving fuels through Catalytic Combustion. In this proven process, all-metal catalysts and catalytic systems oxidize these gases by *low temperature, flameless combustion* . . . to give you usable energy and an odorless and colorless discharge. Incidental benefits often include reduced fire hazards, simplified cleaning maintenance, healthier working conditions . . . and better community relations.



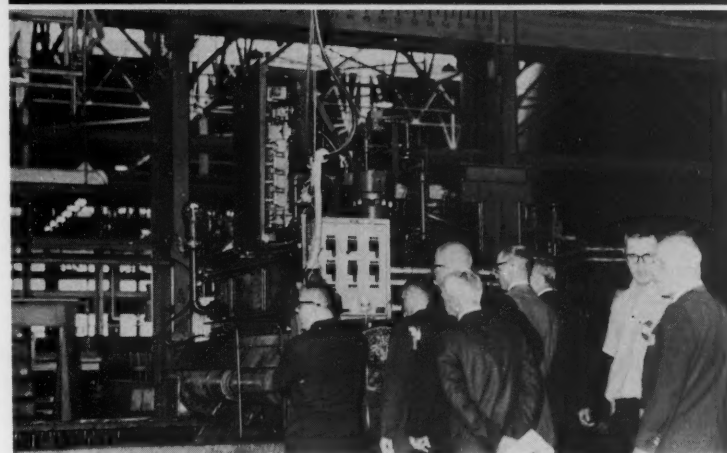
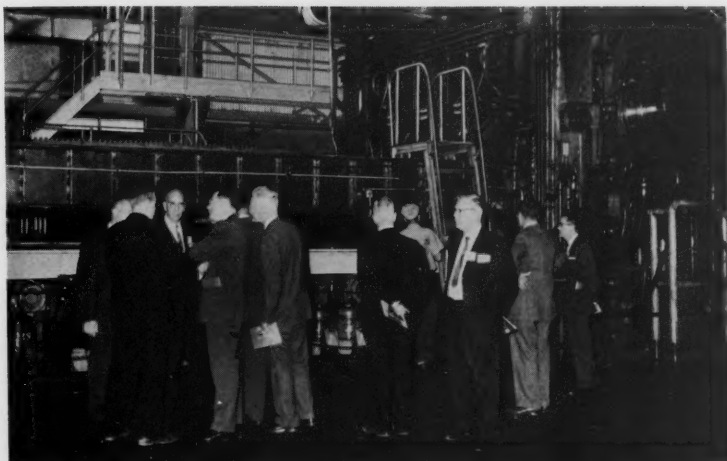
For more details on the economies possible write Dept. A for this brochure. Or, give us a few facts on your oven exhaust problem so we can make specific suggestions . . . to you, or your equipment builder.



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▲ In the finishing department decorators view an exhibit of aluminum products with a wide variety of finishes, including alloys and prepainted Colorweld.

TOP LEFT: Aluminum plate is produced on this 145" plate mill for industrial applications; trucks, railroad cars and many other transportation applications.

▲ BOTTOM: World's biggest plate stretcher at McCook plant has a 16 million pound capacity and is more than 150 feet long.

Kaiser, Reynolds To Expand

TWO major aluminum companies recently announced plans for important expansion which will affect the metal decorating industry.

Kaiser Aluminum & Chemical Corp. reported that it has completed a fully automatic facility in Trentwood, Wash., for processing aluminum sheet and coil for can manufacturers. Installation of the can-stock finishing line, a multi-million dollar system said to be the first of its kind in the United States, followed a two-year development program.

Reynolds Metals Co., meanwhile announced that it would manufacture finished aluminum cans for frozen citrus juice concentrates and sell them directly to packers. The president of the company, Richard S. Reynolds, Jr., said the company would have

three can-assembly lines with a combined capacity of 30 million cans a month operating during the next Florida juice packing season, starting in the middle of this month.

Reynolds stated that lithographed aluminum sheet and fabricated can ends for the assembly plant would be produced at Reynold's Listerhill, Ala. facilities.

Reynolds further reported that its aluminum cans would be priced competitively with containers made of thin tinplate, in six and 12-ounce sizes.

In still another new development, American Can Co. said it will introduce, this month, "the nation's largest aerosol container for consumer use." It is a 24-ounce pressure container, 50 percent bigger than the 16-oz. size which is largest at present.

Cochran Named V.P.

Harold W. Cochran last month was elected executive vice president of



Harold W. Cochran

Caspers Tin Plate Co., which coats and lithographs metal containers, closures, advertising displays, and novelties.

3-M OPENS

(Continued from Page 49)

In his address Mr. Harrison, the Public Printer, paid credit to Minnesota Mining and Manufacturing Co. as one of the companies that has made a major contribution to growth of the lithographic process over recent years through its research efforts. The graphic arts industry has progressed more within the past 10 years, he asserted, than in the previous 100, and the pressure is still on every branch of the printing industry, he reminded, "to give ever faster and faster service."

The lithographic process, he recalled, "was almost at a standstill and fighting for recognition until about 12 years ago. Its troubles lay primarily in the absence of standards in techniques, and products." He credited research, of the type that 3M has engaged in, as being largely responsible for the great strides that the lithographic industry has made over recent years. ■

OBITUARIES

Philip A. Hunt

Philip A. Hunt, president and founder of the Philip A. Hunt Co., Palisades Park, N. J., died in an



automobile accident, Nov. 15. He was 75.

Mr. Hunt was placed in an orphanage at the age of six, following the death of his mother. He left the or-

phanage at 13 to earn his own living. Ten years later, at 23, he formed the company that bears his name.

During the past ten years, Mr. Hunt personally directed the introduction of Hunt products to countries throughout the world and travelled extensively in this work.

The company is today one of the largest manufacturers and suppliers of photographic, graphic arts and x-ray chemicals in the U. S., and its products are now in use in more than 20 foreign countries.

William Chase

William B. Chase, 75, died Oct. 28, in St. Louis. Mr. Chase was secretary of the St. Louis Club of Printing House Craftsmen. He was recently named "International Craftsman of the Year."

Abraham Lewenstein

Abraham Lewenstein, 60, vice president and technical director of the Appleton Coated Paper Co., Wis., died of a heart attack on Oct. 20.

Super Gloss Vinyl Wet Ink Varnish

'BARTELS'

For your finest screw cap requirements, or other solutions to your resistant processing problems, consult BARTELS specialists. BARTELS Metal Decorating Coatings are developed in modern research laboratories, and quality-controlled in matching room and plant to give you consistent order-to-order uniformity. Why not call a BARTELS metal decorating specialist today!

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SPECIAL RATES

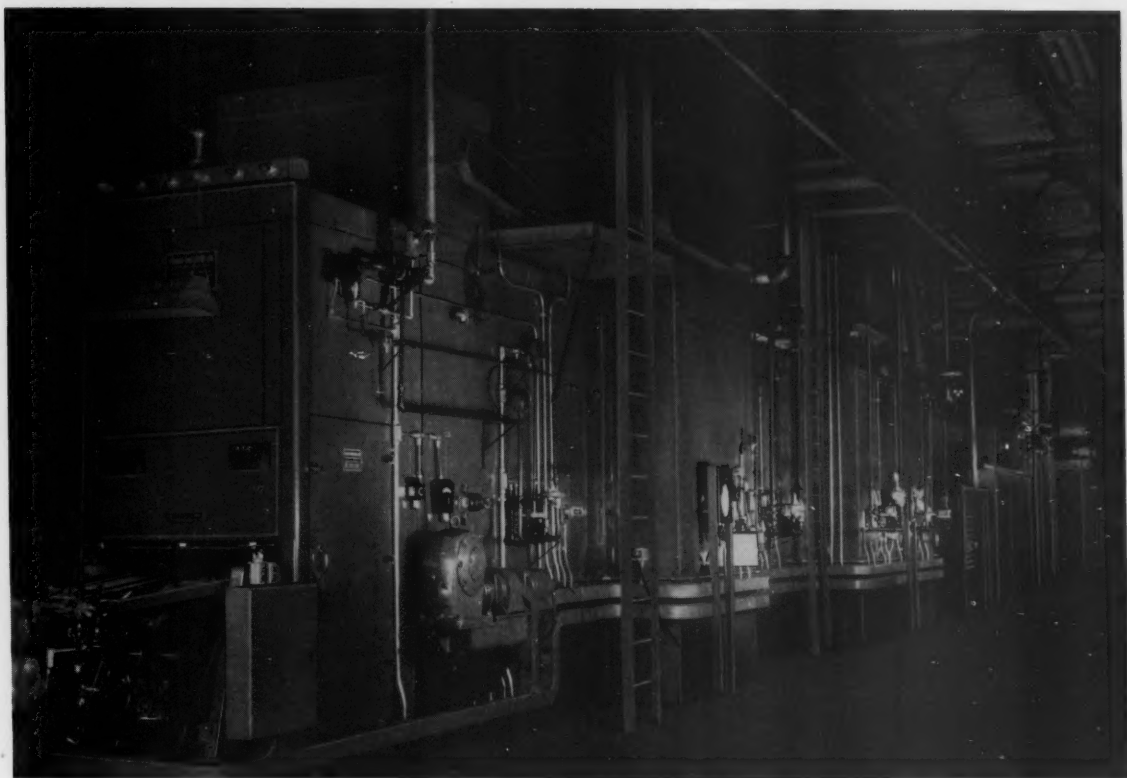
for group subscriptions to Modern Lithography can be obtained for four or more subscriptions at \$2.50 each per year.

Simply list the men in your shop who should be reading ML every month on a sheet of paper, giving their addresses and job titles, and send it to the circulation manager.

Modern Lithography

Box 31

Caldwell, N. J.



can you do tomorrow's job with yesterday's equipment?

It's important to have the latest Young Brothers equipment to obtain the finest results with the newest coatings and the modern metals now available.

Young Brothers engineering know-how plus exclusive designs and patented features are your assurance that your metal decorating line will meet your demands for speed, quality and economy for years to come.

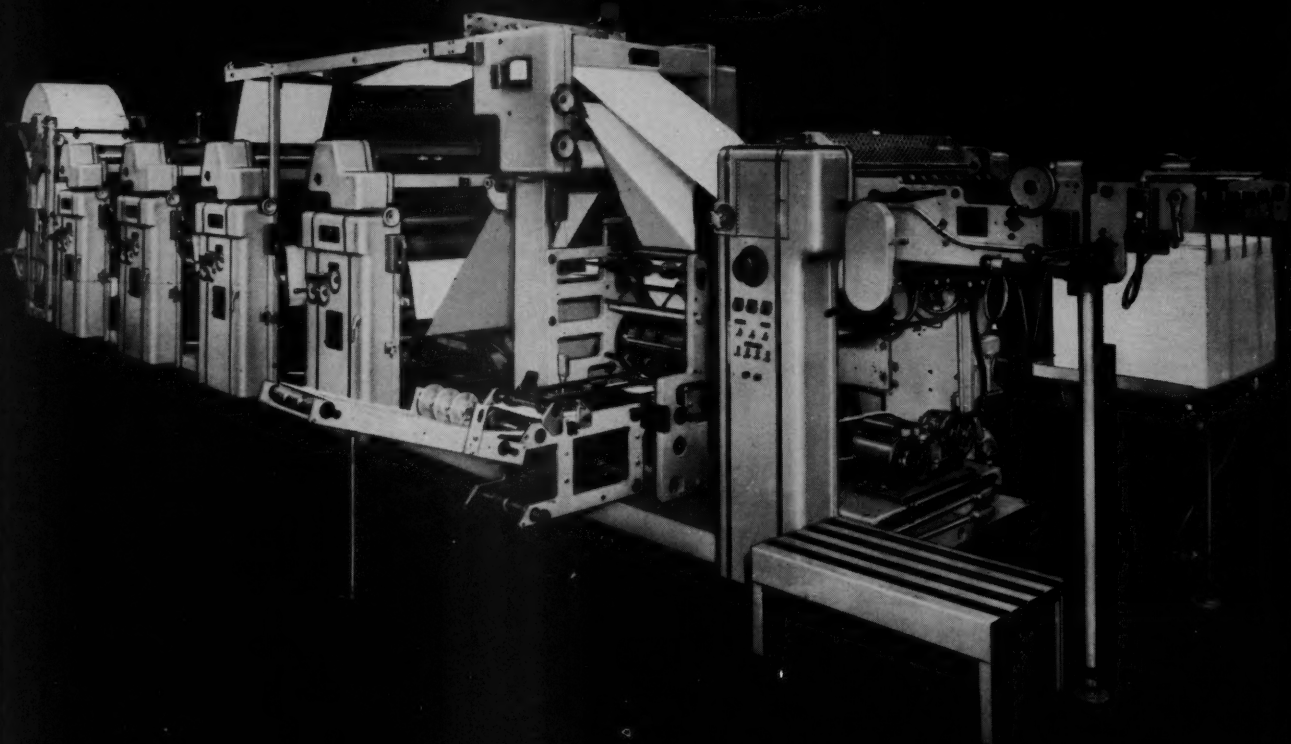
Our thorough knowledge of the Metal Decorating Industry combined with 65 years of experience in building individually designed ovens for all baking and drying processes is your guarantee of better finished products at lower cost.

Write for our Bulletin 9-L. It describes in detail a wide variety of Metal Decorating Ovens and tells about the services available to you.



Systems engineered for economy and versatility
YOUNG BROTHERS COMPANY

ANOTHER *SpeedFlex* JOURNEYMAN



★ DOUBLE WEB

★ DOUBLE PRODUCTION

★ DOUBLES PROFITS

Another "master" in its field, the 4-unit double web JOURNEYMAN equipped with both a folder and a receding pile delivery has taken its place among Speed-Flex precision publication presses for the advertising printer.

When a double web is processed through a 4-unit press, 2 full size $17\frac{1}{2}" \times 26"$ sheets can be severed simultaneously into the receding piler, doubling the production of the machine. When folding, the double web press will provide 2 colors on an $8\frac{3}{4}" \times 11\frac{1}{4}"$ 16-page signature or quarter fold to a $5\frac{1}{2}" \times 8\frac{1}{2}"$ 32-page signature.

Dryers are available for printers using coated or slick finished stock.

*17, 21, 22 & $22\frac{1}{2}"$ cylinder circumferences available. Other sizes can be manufactured to your custom requirements.

Write, phone or wire collect...

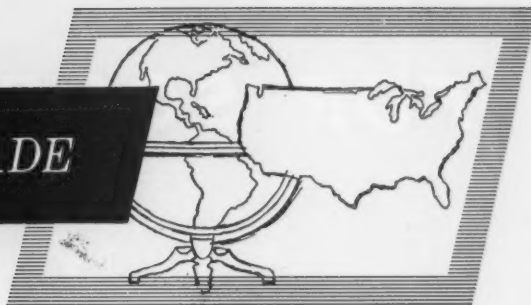
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NEWS about the TRADE



LPNA Appoints Director

Charles Turcotte has been appointed director of promotion and Eastern office manager of the Lithographers & Printers National Association. Mr. Turcotte succeeds Herb Morse, who recently resigned to become director of public relations of the Diamond National Corp. (See page 81).

Mr. Turcotte was formerly administrative assistant for the Wood Office Furniture Institute and served as a member of the "President's Troupe" on the National Stationery and Office Equipment Association's Annual Tour of the Regions.

In addition, as administrative assistant of the National Ice Association in 1959, he had charge of the organization's annual convention, and edited its monthly publication, *Ice News*.

Pickwick, Mor-Craft Merge

Pickwick Press Corp., Pittsburgh printers, has acquired Mor-Craft Co., one of the city's oldest lithographers. The two firms will be merged and will be known as Pickwick-Mor-Craft, Inc. James Rich has been named president of the firm. All personnel will be retained.

PIA To View "Going Public"

Responding to the interest that printers and lithographers have shown in "going public" as a means of obtaining funds for expansion and modernization, PIA has announced that it will devote a full session to this subject at its five-day Presidents Conference for Top Management, which will be held on Jan. 29-Feb. 2, at the Diplomat Hotel, Hollywood-By-The-Sea, Fla.

10,000 Attend March of Progress

MORE than 10,000 persons, representing 30 states and four foreign countries, attended the Graphic Arts March of Progress Exhibit & Conference in Milwaukee, Nov. 9-11.

Sponsored by the Graphic Arts Association in Wisconsin in celebration of its 75th anniversary, the three-day event featured the largest exhibit of printing equipment and material held in the Midwest in more than a decade. Included in the 190-booth exhibit were educational displays and exhibits of presses, cutters, etc.

Four major meetings were held at the exhibition: a Management Conference, Letterpress Clinic, Lithographic Clinic and Artwork Forum. David H. Wells, of Wells Badger Corp., moderated the Management Conference, at which a panel discussed "Trends Which Influence Your Business." Panel members included Richard B. Tullis, of Harris-Intertype Corp.; C. A. Loeftgren, of Harris-Seybold Co.; and W. C. Roberts, also of Harris-Intertype.

Analyzing the causes of the rapid growth of the printing industry during the past decade, the panel pointed out that expansion has been due mainly to increased advertising, greater stress on attractive product packaging, more widespread reading and the population growth. Future trends in the industry, the panel maintained, would be toward more mergers, increased productivity and greater emphasis on electronic processes.

The Lithographic Clinic, entitled "Seeing Light & Color," was one of

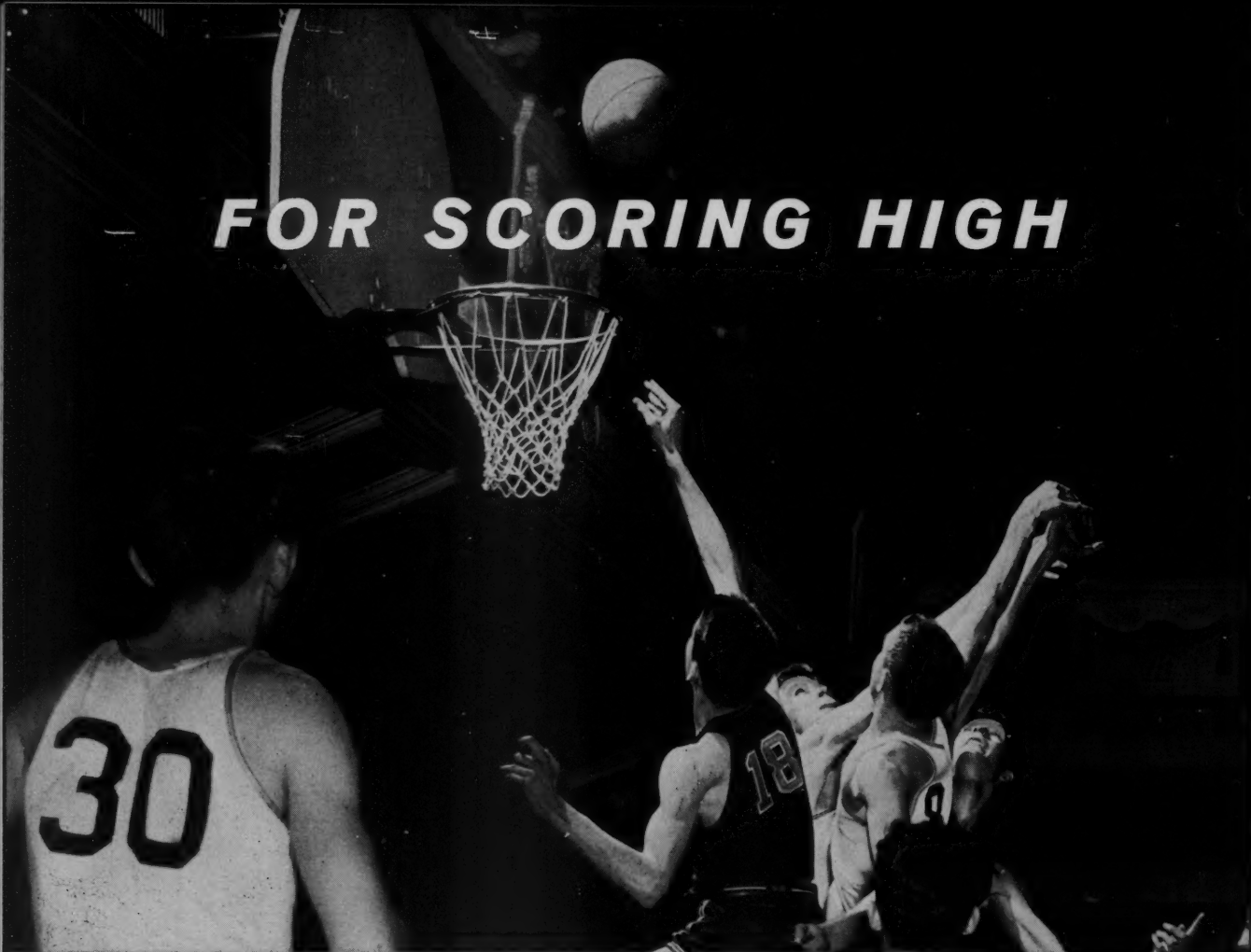
event's highlights and was attended by more than 1,000 persons. Featured speaker was Frank Preucil of the Lithographic Technical Foundation who, through demonstrations, illustrated why visual judgments of tone and color are frequently wrong and why instruments and standardized procedures to measure the properties of color are needed to avoid these misconceptions.

A demonstration of the correct steps used in making modern deep-etch plates, and discussions on the handling of paper and on ink problems were also given as part of the LTF presentation. Other LTF members on the program were Robert F. Reed, research consultant; Edward J. Martin, supervisor of the Reduction to Practice Division; and Wayne E. Schmuhl, supervisor of the Paper and Ink Division and Technical Services Division.

The Letterpress Clinic, entitled "The New World in Letterpress," covered new developments in plates and presses, and presented discussions on new techniques in the field. In addition, advancements in bindery machinery were also reviewed by the speakers.

Talks at the Artwork Forum were designed to determine ways by which a "stronger bridge between the artist and the printer" might be obtained. Chairman of the artwork panel discussion was William J. Stevens, executive vice president of the National Association of Photo-Lithographers. Featured speaker was Robert Hora, art director, of Klau-Van Pietersom-Dunlap, Inc.

FOR SCORING HIGH



The high spots of a fast-moving printing business require alert, effective team-play on the part of the mill making fine coated paper and the dealers selling it. The extraordinary rapport between the Cantine mill and its merchants is the outgrowth of unfailing service on the part of both parties over many busy years.

For buyers of printing, Cantine service and quality are a high-scoring combination...

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ALBANY, N. Y.
W. H. Smith Paper Co.

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Tileston & Hollingsworth Co.
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BRIDGEPORT, CONN.
Lott-Merlin, Inc.

BUFFALO, N. Y.
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CHICAGO, ILL.
Murrane Paper Co.
Norney Paper Co.

CLEVELAND, OHIO
Brewer-Chilcote Paper Co.
Gascon Paper Co.

COLUMBIA, S. C.
Palmetto Paper Co.

DETROIT, MICH.
Union Paper & Twine Co.

GREENSBORO, N. C.
Greensboro Twine & Paper Co.

HARRISBURG, PA.
The Alling & Cory Co.
Paper Dist. of Harrisburg

HARTFORD, CONN.
Elliot R. Vanderlip Co.

HIGH POINT, N. C.
Henley Paper Co.

HOLYOKE, MASS.
Judd Paper Co.

LOS ANGELES, CAL.
Butler Paper Co.
Columbia Paper Co.

MENASHA, WIS.
Yankee Paper & Specialty Co.

McKEES ROCKS, PA.
Darragh Paper Co.

MIAMI, FLA.
Southeastern Paper Corp.
of Miami

MILWAUKEE, WIS.
Yankee Paper & Specialty Co.

NEWARK, N. J.
J. B. Card & Paper Co.
Lewmar Paper Co.

NEW HAVEN, CONN.
The Alling Paper Co.

NEW YORK CITY, N. Y.
Alling & Cory Co.
Miller & Wright Paper
Baldwin Paper Co.
Seelman Paper Co.
Bulkeley Dunton & Co.
Crestwood Paper Co.
M. M. Elish Co.
Forest Paper Co.
Harbor Paper Co.
Linde-Lathrop Paper Co.
Lindenmeyr Schlosser Co.
Marquardt & Co.
Milton Paper Co.
Pohlman Paper Co.
Saxon Paper Corp.
Willmann Paper Co.

PATERSON, N. J.
Paterson Card & Paper Co.

PHILADELPHIA, PA.
W. B. Killhour & Sons
Quaker City Paper Co.
Wilcox Walter Furlong
Paper Co.

PITTSBURGH, PA.
General Paper Corp.

PORTLAND, ORE.
Paper Mills Agency of Oregon

PROVIDENCE, R. I.
Roberts Paper Co.
Sherry Papers, Inc.

RALEIGH, N. C.
Norris Paper Co.

RICHMOND, VA.
Richmond Paper Co.

ROCHESTER, N. Y.
Fine Papers, Inc.
Dyert & Stone

SCRANTON, PA.
Megargee Bros.

SPRINGFIELD, MASS.
Carter, Rice, Storrs & Bement

SYRACUSE, N. Y.
J. & F. B. Garrett Co.

WHEELING, W. VA.
Clarke Paper Co.

WILKES-BARRE, PA.
Megargee Bros.

WORCESTER, MASS.
Butler-Dearden Paper Service
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YORK, PA.
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THE MARTIN CANTINE COMPANY
Saugerties, N. Y.
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Cantine's Coated Papers

FOR OFFSET

FOR LETTERPRESS

Printing Productivity Survey

"The wide variations in productivity from state to state in the two largest printing industries — commercial printing, except lithographic, and commercial printing, lithographic — point to the need for management to raise levels of output," the Printing and Publishing Industries Division of the Business and Defense Services Administration, U. S. Dept. of Commerce, has announced.

The statement was made upon the completion of a survey, entitled "Productivity in the Commercial Printing Industries," which showed that the printing establishments surveyed get a return of only \$1.55 for every \$1 spent in wages.

The study does not include establishments whose principal activity is the manufacture of books, greeting cards or manifold business forms, or commercial printing plants specializing in engraving.

A copy of the study is available at a nominal cost from the U. S. Dept. of Commerce, Washington 25, D. C., and its field offices.

Philadelphia Printing Week

The Education Council of the Graphic Arts Industry will join with the Philadelphia and Delaware Valley graphic arts industry to celebrate Printing Week at a banquet on Jan. 19, at the Sheraton Hotel, Philadelphia.

During the banquet, the Council will present its Fourth Annual Awards as follows:

1. James J. Rudisill Awards to three local printing industry trade groups for outstanding printing industry educational programs.
2. Elmer G. Voigt Awards to members of national printing trade organizations associated with the Council.
3. Horace Hart Award to a person in government service who has made a major contribution to the field of graphic arts education.

The Council will also present its Outstanding Service Award to one of its members. More than 1200 persons are expected to attend the banquet, which will climax the week-long celebration of the 256th birthday anniversary of Benjamin Franklin.

Chicago Plans Printing Week Campaign

UNDER the leadership of a newly organized Graphic Arts Council, 29 organizations, representing every area of the printing industry, have united to tell the public, during Printing Week next month, about the role of the graphic arts in Chicago's economic, social and cultural life.

Included among the project's backers are the Lithographers Club of Chicago, the Lithographic Technical Foundation, the Midwest Litho Trade Association and the Amalgamated Lithographers of America. The membership list also includes other craft organizations, paper and ink associations, supplymen, the crafts-

men's club and numerous local clubs, rotogravure and screen process groups, publishers, artists and, for the first time, various advertising organizations.

Principal feature of the promotion will be a display of "Chicago's Proudest Printed Products," which will be open to the public all day, Jan. 16, in the grand ballroom of the Palmer House. The display of products will be shown on television from the hotel and will then be moved to the public library, where it will be shown for an indefinite period. There will be a banquet at the hotel that evening, with several of the city's business, civic and cultural leaders included among the 750 guests.

Furthermore, several printing executives are scheduled to give talks to high school students, in which they will outline the opportunities for careers in the graphic arts. There will also be an essay contest in which a student who writes the best paper on the graphic arts and has it published in his or her high school paper will be given an award.

In addition, the committee is working on plans to have displays in store and bank windows, and also radio discussions on the importance of printing and the opportunities for advancement in the industry. Promotion men from several agencies have been enlisted in an effort to make this part of the campaign as successful as possible.

Robert R. Snediker, president of Chicago Show Printing Co., has been named president of the Council. "The primary purpose of the campaign," Mr. Snediker said, "is of course to sell more printing. In addition, the campaign is designed to make the general public aware of the vital role that the graphic arts plays in the economic and cultural growth of Chicago."

Mr. Snediker went on to point out that printing is Chicago's sixth largest industry, employing more than 100,000 persons in some 3,000 plants, and has an annual payroll of more than \$250 million.

Franklin Award To Taylor



General Maxwell D. Taylor, Military Representative of the President, will be presented the Franklin Award of Printing Industries of Metropolitan New York at the organization's Printing Week Dinner, to be held on Jan. 15 at the Hotel Commodore in New York City.

MVLA Elects Officers

Benjamin F. Klein, of Young & Klein, Inc., was elected president of the Miami Valley Lithographers Association, Cincinnati, at its annual dinner meeting in Kenwood Country Club. He succeeds Raymond Osterlander of U. S. Playing Card Co.

Other officers elected were: vice president, Eric Nielsen, of Nielsen Lithographing Co.; and treasurer, Vern Anderson, of Standard Publishing Co.

S & V Names Managers

The appointment of Howard J. Soriano to general manager and Thomas B. Buchanan to general sales manager has been announced by



T. B. Buchanan



H. J. Soriano

Sinclair and Valentine, part of the Chemical Div. of Martin Marietta Corp., New York.

Mr. Soriano has been with S & V 25 years. He began as a clerk in the N. Y. Order Dept. and advanced to assistant export manager in 1938. Upon returning from the service in 1946, he became assistant to Anthony Math, company president. In 1949, he became eastern sales manager, and in 1952, general sales manager, the post he held until his recent appointment.

Mr. Buchanan joined the firm in 1946 as assistant manager of the Chicago Factory. Two years later, he joined the company's sales force and was assigned to the Philadelphia office. In 1955 he became branch manager of that office and in 1957 was made assistant to the vice president of sales at the firm's headquarters in New York.

Lincoln Buys McKenzie

Lincoln Printing Co., New York, corporate-financial printers, has acquired McKenzie Service, Inc., also of New York, for an undisclosed amount of cash and stock.

McKenzie Service, imprinters, binders, and finishing mounters, has current annual sales of approximately \$2.5 million. The combined companies will have total annual sales in excess of \$5 million.

Founded in 1927, McKenzie Service, will continue as a wholly-owned subsidiary of Lincoln Printing. Henry M. Newman will remain as chief executive and there will be no changes in either the management or personnel of the company. Edward O'Brien

Lincoln president will become the chairman of the subsidiary.

McKenzie Service's plant is presently located at 95 Morton St. On December 1, 1961, the company will start moving to 340 West St., which is the new St. John Terminal building. McKenzie will occupy 100,000 sq. ft. on the second floor, plus an additional 20,000 square feet of platform space for shipping and receiving. The new platform can load and unload as many as 10 trucks simultaneously.

Merger Plans Withdrawn

The proposed merger between Macfadden Publications, Inc., and Process Lithographers, Inc., in which Macfadden is a major stockholder, has been called off. Reasons for action were not disclosed.

The merger was initially proposed last September. If it had gone through, Process would have printed the 12 magazines that Macfadden is now publishing. According to reports, Process will continue to do commercial printing for Macfadden and the 30 percent interest that Macfadden has in Process has not been affected by the withdrawal of merger plans.

It was also reported that Mac-

fadden is still planning to merge with the Bartell Broadcasting Corp., which acquired a major interest in the publishing firm last February. Bartell operates radio stations in Milwaukee, New York, San Francisco and San Diego.

Einson-Freeman Names Massa

Einson-Freeman Co., Long Island City, N. Y. has announced the appointment of Robert E. Massa as director of Food and Beverage Marketing. Mr. Massa will direct and coordinate merchandising planning in the food and beverage field.

Prior to the appointment, he was sales promotion and merchandising manager of the Jacob Ruppert Brewery.

Eastern Assigns Reish

Eastern Colortype Corp., offset printing firm of Clifton, N. J., has opened a new Philadelphia-area office at 2 Bryn Mawr Ave., Bryn Mawr, Pa.

Richard L. Reish, formerly of Haynes Lithograph Company, has been appointed manager of the Bryn Mawr office, which will service accounts in the Greater Philadelphia area.

Spanish Printers Tour U. S. Plants



J. T. Groet, left, of Eastman Kodak Co., shows Carlos Godo, Renando Carbonell de Leon, and Gonzalo Alonso a process camera at Kodak's graphic reproduction technical service center in Rochester, N. Y. The Spanish printers are members of a study team now on a five-week tour of the U.S. in order to examine manufacturing developments and management procedures in the American graphic arts industry.



PAINTED BY C. H. DUBRE

A General Advertising and Art of Companies in the year 1884 by Currier & Ives, on the Office of the Director General of the United States, for the Southern Division of New York.

THE FARMERS HOME -- WINTER.

NEW YORK PUBLISHED BY CURRIER & IVES, 112 NASSAU STREET

CURRIER & IVES, LITHO. N. Y.

May the gentle joys of Christmas grace your hearth and home this Yuletide... Howard Bond...and

HOWARD PAPER MILLS • DAYTON, OHIO • DIVISION OF  **St. Regis**
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THE FARM-YARD IN WINTER.

NEW YORK PUBLISHED BY CURRIEN & IVES, 152 NASSAU STREET

CLARK & JONES, LITH., NO. 1

Champion Appoints Dodd

W. R. Dodd, widely known for his work in the National Association of Litho Clubs has been named technical service representative for the



W. R. Dodd

eastern sales region of Champion Papers, Inc.

Mr. Dodd joined Champion seven years ago as a customer service representative working out of the Texas Division mill. Immediately prior to that he had been offset press room foreman for Gulf Printing Co., of Houston. A past president of the Houston Litho Club, he has also served as club coordinator for the National Association of Litho Clubs.

For two years, he was chairman of the Southwest Litho Clinic. In his new assignment for Champion, Mr. Dodd will cover the area from Miami to Boston.

Brown Sees Litho Boom

"Automation has made the lithographic industry the fastest growing field in the graphic arts," Kenneth J. Brown, president of the Amalgamated Lithographers of America, told Buffalo Local 2 at a November meeting in Buffalo.

Mr. Brown predicted that "by 1965 more than half of the nation's \$10 billion printing bill will be spent in lithographic shops."

Commenting on ALA's role in the expansion of lithography, he went on to say that, as in the past, ALA will continue to "advocate the installation of advanced equipment and encourage members to accept new processes." He said this enlightened policy to-

ward automation will enable the industry to provide a competitive product at reasonable costs to the customer and will, at the same time, make more jobs for ALA members.

Reviewing ALA's recent accomplishments for its members, Mr. Brown said that the union has been faring extremely well at the bargaining table. "Lithographers have been getting wage increases ranging from five to seven dollars a week, which is by far the highest level of increases in the graphic arts."

He attributes the union's success in gaining these wage gains to ALA's position on technological improvements and its aggressive bargaining policy.

Di-Noc Opens New Plant

Several hundred persons attended the recent opening ceremonies of the new plant for the Photo Products Div. of Di-Noc Chemical Arts, Inc., in Honeoye, N.Y. Edwin A. Sweet, Sr., president, formally opened the new facilities by cutting a ribbon with silver and gold scissors on the same spot where he and Governor Rockefeller had turned a shovel of dirt during ground-breaking ceremonies in the spring of 1960.

At the opening ceremonies, Frank Sweet, executive vice president and general manager, said the new plant is equipped with completely modern production and research facilities, and will be used primarily to produce graphic arts plates, films and X-ray film.

All production areas in the plant are temperature controlled to plus or minus one degree and humidity to plus or minus one percent. In addition, the plant is equipped with huge filters that will purify all plant air by removing dust particles as small as .3 microns (1/80,000 of an inch).

Guest speakers at the ceremony were John S. Stillman, of the U.S. Dept. of Commerce; Representative John Tabor; and Assemblyman Robert Quigley.

Plant tours were conducted, enabling the public to inspect the facility's equipment. Explanations were given by Di-Noc technicians on how photographic films and plates are made.

Diamond Names Morse

The appointment of Herbert W. Morse as director of public relations of the Diamond National Corp. manufacturers of packaging, paper-



H. W. Morse

board, molded-pulp and lumber products and printed advertising materials, was announced on Nov. 14.

Mr. Morse will supervise the firm's financial-stockholder, institutional, community, employee and product communications. He will operate from the new Diamond National building at 733 Third Ave., New York City, where the company consolidated its corporate, division and administrative activities this year.

For the past eight years, Mr. Morse served as public relations director of the Lithographers & Printers National Association. He also held the post of eastern manager operating from the Association's branch office in New York.

In the graphic arts industry, Mr. Morse is well-known for his contribution to the growth of the lithographic process. He conducted the Association's Annual Lithographic Awards Competition & Exhibit, which honors the creators and producers of outstanding printed material for their role in aiding business and industry.

Hurst Moves Offices

Hurst Graphichemicals, producers of varnishes and solvents for the graphic arts, has announced that it has moved its offices and production facilities from 2700 W. Ave. 34, to a new building at 4138 Eagle Rock Blvd., Los Angeles.

NEW STERLING LITHO-GLOSS, SNOWTONE, T



WINDOW BEAUTY IS ANDERSEN

The Andersen Corporation inserts were lithographed on 100# Sterling Offset Enamel by Western Printing and Lithographing Co., St. Louis. The job was run on a 50 x 72 Harris 4-color press. Agency for Andersen is Campbell Mithun, Inc., Minneapolis.

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'Report To New York On Web-Offset'

THREE prominent persons in the graphic arts gave a "Report to New York on Web-Offset" at the Oct. 26 meeting of the Lithographic Division of Printing Industries of Metropolitan New York at the Henry Hudson Hotel, New York. Cooperating in the presentation was the Web-Offset Section of PIA.

The speakers surveyed the web field in three general categories: (1) the recent strides made by the process and its expected future growth; (2) current methods employed to solve production problems and maintain quality; and (3) the kinds of jobs currently produced by web-offset.

The speakers were James N. Johnson, president of Standard Publishing, Cincinnati; Charles W. Cook, vice president of lithography and technical procedures at Haynes Lithograph Co., Rockville, Md.; and Bernard B. Levine, secretary of Mercury Lithographing Corp., Brooklyn, N. Y.

In his talk, entitled "Yesterday, Today and Tomorrow in Web-Offset," Mr. Johnson reviewed briefly the development of web printing in the U. S. and described some of the problems that early users of the process encountered. He went on to say that, although the process has had widespread publicity and web presses have been greatly improved during recent years, there are still several major unsolved problems in the web printing field. Foremost of these, he said, are tack problems and paper waste. In addition, there is an acute shortage of capable web pressmen. He expressed the opinion that the future of web printing depends largely upon whether or not these problems can be eliminated.

He cautioned those who are considering entrance into the web field to proceed slowly and carefully. "Talk to users before you buy," he said, "and study the process carefully to make certain that it fits your needs. You need 40,000 to 50,000 runs at

least before the web process will pay for itself. Ask yourself these questions: 'Am I prepared to conduct a training program of from three to twelve months in order to develop capable operators? Can I sustain substantial losses in wasted materials, particularly at the outset?'" Concerning waste, Mr. Johnson cited the example in which Safran Printing had lost during a single job \$30,000 in paper waste alone.

Speaking on the subject, "Getting Quality and Production On a Web Press," Mr. Cook reviewed his firm's entire operation when running a web job. Beginning with the handling of roll stock, he said that Haynes has found that it is more economical to have its rolls stored on end, because there is less "starring" and gouging and fewer flat spots in the rolls than when they are stored on their sides. In addition, Haynes is now using only pressure clamp lift trucks which, he said, are superior to other types. These precautions, he reported, reduce the number of breaks that occur

when the stock is running through the press.

He went on to say that his firm is now also using flying pasters which have been performing very well. Haynes has estimated that with these pasters it is gaining 10 percent more press time than it did before installation of the units. In addition, he said that Haynes is using mainly copper-plated aluminum deep etch plates which give excellent results to 500,000 impressions.

Considering the shortcomings of the web process, Mr. Cook said that the main improvement will have to come in paper rolls. Despite careful handling, they still present major problems. If better rolls are not produced, the future of web-offset could be very limited. In addition, Mr. Cook said there is a definite need for harder and smoother drying inks. He expressed the hope that there would be more research conducted in the future to solve this ink problem.

Mr. Levine discussed the kinds of work currently being produced by web-offset. He said that "the subject of products by web-offset is so broad and based on so many variables that it is difficult to make a general statement without adding several exceptions. One of the few general

(Continued on Page 111)



Four persons who played prominent roles at the recent "Report to New York on Web-Offset" meeting are shown here examining one of several exhibits that were on display. They are, left to right, James N. Johnson, Charles W. Cook, Bernard B. Levine and Jesse J. Lehman, chairman of the club's Lithographic Division.

AS WE GO TO PRESS

RIT Plans New Campus

Rochester Institute of Technology will move to a 1,000-acre campus in the town of Henrietta, N. Y., the board of directors of the Institute announced late in November. Total cost of the project was estimated at \$40,000,000, including \$1,700,000 for land acquisition.

Construction of buildings on the site is expected within two years, with the complete move being made within 10 years. The campus site is approximately six miles from RIT's present location in Rochester.

RIT president Mark Ellingson termed the board decision "the most significant single act in the 132-year history of the Institute." He said it was the culmination of more than two years of study and was favored over an alternate proposal for an urban development plan centered around the present 13-acre campus.

Development of the new campus will enable RIT to construct buildings with a planned total floor space of some 880,000 sq. ft. as compared with its present 386,861 sq. ft. of floor space. Included in the plans are provisions for a student center, modern classrooms and laboratories, library, athletic and recreational facilities, and men's and women's dormitories.

Expectations are that RIT's day school enrollment of 2,292 this year will be more than doubled to about 6,000 students by 1969-70. In anticipation of this enrollment increase, made possible by the move to a larger campus, Institute housing will be expanded from its present facilities, which provide for some 669 students to on-campus housing for nearly 3,000 undergraduates. Also, parking facilities will be expanded to handle some 4,500 cars as compared with the present facilities, able to take care of only 638 cars.



Shown here concluding arrangements for the purchase of Miller-Trojan by Clary are, l. to r., George Miller, Miller-Trojan president; Paul Stevens, vice president of Clary's Graphic Arts Div.; and Web Martin, who is vice president of Miller.

Clary Buys Miller-Trojan

Clary Corp., San Gabriel, Calif., has announced its third acquisition of 1961, the Miller-Trojan Co., of Troy, O., manufacturer of equipment for making lithographic plates.

According to Clary, Miller-Trojan will operate in coordination with the firm's Graphic Arts Division in Fort Worth, Texas, which manufactures offset presses.

In addition to plate making equipment, the purchased firm also makes equipment for the reproduction of blue prints and has recently developed advanced equipment for multi-color plate making, as well as line and half-tone negative making equipment.

According to George D. Miller, Clary president, Miller-Trojan is expected to add about \$500,000 in annual sales to the firm's Graphic Arts Division. Mr. Miller also reported that Miller-Trojan's line of products and its graphic arts technical school in Troy will be expanded and improved. Complete schedule of classes to be conducted during 1962 will be announced soon.

Miller-Trojan will remain in Troy and company personnel and officers will be retained.

Warren Opens Research Plant

The S. D. Warren Company last month doubled its capacity for re-

search activity with the dedication of expanded facilities at its 107-year-old paper mill at Westbrook, Me.

Warren officers took the occasion to review the company's research developments through the years, beginning with the first formal research program in 1895. A new laboratory was erected in 1929.

The company reports it has invested in research "at a higher rate than most paper companies," viewing the policy as product and leadership insurance. Among the developments originating at the Warren laboratory were coated two-side printing papers, wet strength map papers, cast-coated folding boxboard, presensitized paper lithographic plates, release-coated converting papers and a full range of permanent book grades for the publishing and commercial printing fields.

Personnel at the laboratory has quadrupled since the end of World War II, the company stated.

Robport Names Randall

Roberts & Porter, Inc., announced Nov. 28 the appointment of Theodore P. Randall to the firm's board of directors. Mr. Randall also has been named head of the firm's entire eastern operations. He was formerly Boston branch manager.

Mr. Randall is active in several graphic arts organizations and is president of the New England Printing Supply Salesmen's Guild. He has almost 30 years experience in the graphic arts, ten of which were spent in lithographic plants.

Atlanta Demands Received

LPNA has announced that lithographers in Atlanta, Ga., have received contract demands from the ALA local in that city. Variable wage increases up to 39 cents an hour were asked, and two more paid holidays, which would bring the total to eight. A \$4 welfare increase was also proposed.

Blattenberger Appointed

A committee to promote the growth of the graphic arts industry in Philadelphia has been established by Printing Industries of Philadelphia, Inc., The Hon. Raymond Blattenberger, U. S. Public Printer during the Eisenhower administration, will head the committee and direct its efforts to explore ways to enhance the prestige and growth of the city as a printing center.

Prior to his eight years as Public Printer, Mr. Blattenberger was senior vice president of Edward Stern & Co., Philadelphia printing firm. He is a past president and first honorary life member of PIP and a past president of Printing Industry of America.

Beckham Heads G.A. Press

Graphic Arts Press, Inc., Washington, D. C. announced on November 23 the appointment of John S. Beckham as president of the company.

Mr. Beckham is a past president of

Printing Industry of Washington, D. C.

Davidson Changes Name

The name and corporate structure of Davidson Corp. has been changed to the Davidson Co. With the change, Davidson has become a division of Mergenthaler Linotype Co., Brooklyn, N. Y. Davidson was formerly a subsidiary of Mergenthaler.

In announcing the change, president William Davidson reported that the action "will in no way affect organization personnel, nor alter the firm's sales and service policies."

Hall Names Two

Arthur N. Knol has been elected chairman of the board of W. F. Hall Printing Co., Chicago, and Robert S. Knox has been elected president, according to an announcement by the board of directors on Nov. 28.

Mr. Knol succeeds Frederick Secord who, after serving 29 years as board chairman, was elected execu-

tive chairman of the board. Formerly president of the firm, Mr. Knol becomes the third board chairman in the company's 70-year history.

Mr. Knol was formerly executive vice president and treasurer. According to the announcement, he will maintain his position as treasurer.

NAPL Marks 1400

The National Association of Photo-Lithographers has announced that its membership reached 1400 in November. The 1400th member is Intelligencer Printing Co., Lancaster, Pa., which was established in 1794 and has been in continuous operation ever since.

The firm operates both single and multi-color letterpress and offset equipment and maintains its own typesetting department, engraving plant and binding facilities. It is presently building a new 40,000 square foot one-floor building in Lancaster where its complete printing operations will be housed.

Color, anyone? *Successful color specification calls for top-flight equipment. Without it you're prone to make errors. With it you score every time. In the field of color specification there is no better equipment than the three volumes described below.*

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Four-Color Process Guide Takes the guesswork out of four-color process reproduction. Every possible two-, three- and four-color combination available from the process inks, shown in print — 5,632 different color patches, 224 pages—each 11 x 14". Arranged in logical sequence. This monumental work has been acclaimed by the foremost graphic arts authorities as one of the most important contributions in the Graphic Arts in the past 50 years. \$110. Created by Collier Engraving.

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☐ Grand Book of 3-Color Blending
☐ Four-Color Process Guide

Name

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City State

K. C. Firm Formed

J. Leon Rosse, Jr., and Robert M. Hamilton have formed Rosse-Hamilton, Inc., at 3607 E. 12th St., Kansas City, Mo. The company will specialize in four-color process printing as well as the production of industrial publications.

Mr. Rosse, who is president of the new firm, was formerly employed by Wertgame Paper Co. Mr. Hamilton, the firm's vice president and production manager, operated Hamilton Printing Co. for six years. Prior to that he worked for 17 years as a lithographer.

3M Names Walton

Minnesota Mining & Mfg. Co., St. Paul, Minn., has announced the appointment of Dr. Charles W. Walton as vice president of research. He succeeds Dr. Carl Barnes, who recently resigned from the company.

Dr. Walton was formerly vice president and general manager of 3M's adhesives, coatings and sealer divisions. He joined the firm in 1947 as assistant to the executive president.

Indian Printers Tour U. S.

On October 25, executives of the Indian printing industry had a first-hand view of American ink-making techniques at Interchemical Corporation's Printing Ink Div. plant in Elizabeth, N.J. Prior to that, the Indian Printing Productivity Team, whose four-week tour of the United States is sponsored by the International Cooperation Administration, visited Interchemical's Central Research Laboratories in Manhattan, where research on basic chemical coatings phenomena is being conducted.

The Printing Productivity Team, composed of Indian industrial management executives and officials of the India Government Printing Establishment, is touring this country to study American printing production, and to become familiar with standard machines and new equipment developments. The project is expected to contribute to India's industrial development under its Third Five Year Plan.

In addition to its tour of Inter-

chemical's Elizabeth and New York facilities, the team has visited several leading printers, press and equipment manufacturers, technical schools, and film producers. Its around-the-world tour included a one-week stay in the United Kingdom, and will be completed with two weeks of similar observation and discussion in Japan.

G. A. Career Film

The first motion picture to depict executive and professional career opportunities for young persons in the printing and publishing industries is now available from the Education Council of the Graphic Arts Industry, 1411 K St., N.W., Washington 5, D.C.

Entitled "Printexec," the film is a 16 mm., sound, color, 20-minute movie. Stating that "this movie can be an important tool in attracting qualified executive and professional manpower to the industry," the Education Council is urging companies and organizations to have copies of the film made in order to have them distributed for showings in schools, before civic groups, and on television.

Randall Named District Mgr.

Appointment of Ralph H. Randall as New York district manager for Harris-Seybold Co., a division of Harris-Intertype Corp., Cleveland, has been announced.

Mr. Randall joined the company in 1934, and has had considerable experience with commercial lithographers, carton producers, publishers and binderies, having served in various sales executive capacities. During World War II he directed several Air Force printing plants.

Mr. Randall will make his headquarters in Harris-Seybold's New York offices at 800 Second Avenue.

Illinois Newspapers To Offset

The Citizen Newspapers of La Grange, Ill. will convert to offset next spring with the installation of a Goss web-offset press and auxiliary platemaking equipment. According to the company, the newspapers will retain hot type equipment for makeup.

The combined weekly circulation of the firm's several papers is approximately 50,000.

Warren Receives LTF Certificate



The Executive Committee of the Lithographic Technical Foundation recently toured S. D. Warren's mill and new research laboratory in Cumberland Mills, Me. While there the committee members also held an executive meeting at which it presented S. D. Warren a certificate of life membership in LTF, for the company's endowment contribution to the Foundation. Shown receiving the certificate for Warren is, left, John L. Kronenberg. Making the presentation is Felton Colwell, LTF president.

the most versatile
offset press
ever designed...

the new DAVIDSON DUALITH 500

While basically designed to provide you with the finest, simplest, easiest-to-operate, small offset press obtainable, the unique, uncluttered two-cylinder design of the new Dualith 500 makes it possible, on a single machine, to do:

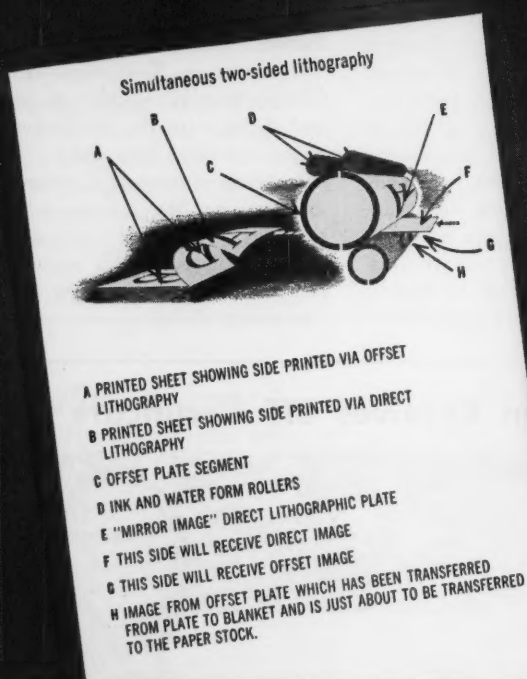
1. **REGULAR OFFSET PRINTING** of unequalled quality and economy—from either metal plates or paper masters.
2. **SIMULTANEOUS TWO-SIDED LITHOGRAPHY**—this feature permits even greater cost savings on those jobs where the combination of offset lithography on one side of the sheet and direct lithography on the other may be employed. (Direct lithography has certain limitations: it requires a mirror image plate, generally of shorter life than an offset plate, and will not print halftones or solids of a quality comparable to the results obtainable by offset lithography.)
3. **DRY OFFSET PRINTING**—the interchangeable segments of the new Dualith 500 make it unbelievably simple to change to dry offset operation for the ease and economy of dry offset for longer run work.
4. **"DAVENGRAVING"**—beautiful printing and embossing in a single run through the press may be done simultaneously with either wet or dry offset printing.
5. **LETTERPRESS PRINTING**—Imprint from Linotype slugs. Print or imprint from rubber plates, curved electrotypes, or T-bottom type.
6. **NUMBERING**—from true "printers type" numbering machines inked by the full press inker, and numbering and imprinting can be combined in a single operation.

With the Dualith 500, you'll get superb printing quality with every method. Registration is the best. Ink coverage is complete and uniform to give you sharp blacks and clear, true colors. Large well-placed controls make operation exceptionally easy. The built-in chain delivery is standard equipment at no extra cost, to give clean, positive stripping of every sheet.

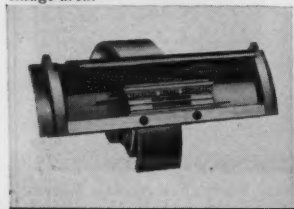
And look at the speed... up to 8,000 impressions per hour... and up to 16,000 on certain "both sides at once" jobs. You just haven't seen an offset press until you've seen the new Dualith 500.

**YOU'LL BE YEARS AHEAD WITH THE NEW
DUALITH 500**

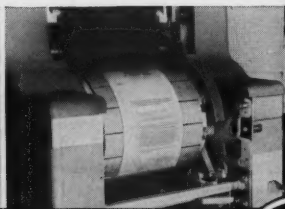
Send today for colorful 12-page brochure.



Imprint chase assembly holds Linotype Slugs; makes short work of imprinting jobs. Imprint may be readily positioned anywhere in the image area.



Set up for "Davenporting," photo shows the high etched embossing plate for simultaneous raised printing—an exclusive Dualith feature.



THE DAVIDSON COMPANY
A Division of Mergenthaler Linotype Co.



29 Ryerson Street, Brooklyn 5, N. Y.

LPNA Litho Competition Set

THE first nation-wide call for entries of outstanding lithographic material produced during the past year in the 12th Lithographic Awards Competition & Exhibit was sounded this month by the Lithographers & Printers National Association, sponsors of the annual industry tribute to lithographic producers and creators.

The Association has mailed 36,000 Announcement Brochures and Entry Blanks to lithographers, advertisers, agencies, designers, production men, public relations directors, sales promotion managers and trade associations, according to George P. Hughes, sales manager, Snyder & Black & Schlegel, who is in charge of conducting the promotion.

Final deadline for receipt of entries, which can be submitted in advance of that date, has been set for January 5, 1962. Judging will take place in New York City during the week of January 15.

"The 1962 Competition," Mr. Hughes said, "has 52 diverse classifications of lithography and combinations of printing processes. For the first time special consideration is being given to lithography on foil in the direct mail and packaging fields, for which new categories have been created. Lithoed vacuum formed displays have also been put into a separate category."

The appointment of Douglas J. Scott, eastern sales manager, H. S.

Crocker Co., Inc., as chairman of the 1962 Awards & Exhibit Committee was announced by Mr. Hughes. This committee is charged with selecting advertising, design and production experts from outside the industry to serve as a panel of judges to choose the winning specimens.

The 52 main classifications of eligible material include direct mail, business reports, point-of-sale displays, posters, car cards, packaging material, bank and commercial stationery, books, magazines and house organs, menus, programs, greeting and pictorial cards, calendars, art prints, maps, decals, metal litho, specialties and novelties and self-advertising material.

Winning specimens will be selected on the basis of three values: quality of reproduction, excellence of art and design, and effectiveness of piece for its intended purpose. Six individual awards of equal merit will be given to winners in each of the 52 classifications for a total of 312 awards. Winning specimens will be published in a 100-page Awards Catalog.

Certificates of Award will be presented to the winners on May 7, 1962 at an Awards Dinner at the LPNA Convention, Boca Raton Hotel, Boca Raton, Fla. Announcement Brochures and Entry Blanks may be obtained from Awards Competition, Lithographers & Printers National Assn., 597 Fifth Ave., New York 17.

Offset Newspaper Seminar

The Western New York Newspaper Publishers convened at Rochester Institute of Technology on Oct. 21 for a seminar on offset newspapers and a web-offset demonstration. After talks by Herb Phillips, assistant head of RIT's Graphic Arts Research Dept. and Jim Marshall, supervisor, web offset laboratory, the group observed demonstrations in all phases of offset newspaper production.

The demonstrations included all the steps of typesetting, camera work, and platemaking, and concluded with

the offset press production of a sample newspaper. Questions were answered and discussions took place during the demonstrations. A panel discussion was also held.

Frock Joins Miers

Paul D. Frock has been appointed sales representative for Miers Lithographic Service, Inc., Allentown, Pa. He was formerly a member of the printing sales staff of the parent firm, William G. Johnston Company, Pittsburgh.

Dahlgren Names Reese

T. E. Reese has been named sales engineer of the Dahlgren Manufacturing Co., Inc., Dallas, Texas. Formerly employed by Vought Elec-



T. E. Reese

tronics, Mr. Reese comes to Dahlgren with wide experience in electronics and printing machinery design.

Mr. Reese will be responsible for all sales promotional activity of the Dahlgren Dampening System. According to the company, he will, in the near future, be opening field offices to facilitate better sales and service activities for the firm.

Acquires Strathmore Control

Hammermill Paper Co., Erie, Pa., announced November 6 that it had acquired control of Strathmore Paper Co. through an exchange of stock. According to Hammermill, the transaction involved an exchange of 63,793 shares of its stock for 42,528 shares of Strathmore stock held by two shareholders.

According to F. N. Bridgham, Strathmore chairman, the purchased firm will continue to operate under the present management and no immediate plans of consolidating facilities are anticipated.

Strathmore has plants in West Springfield, Woronoc and Turner Falls, Mass. Last year the company had sales in excess of \$14 million, and a net income of more than \$700,000. Strathmore manufactures quality bond, artist, advertising and technical papers.

Hammermill had acquired 60 percent of Strathmore's Old Colony Envelop Co. in June, 1960, and later purchased Old Colony's entire assets. In addition, Hammermill has during the past two years acquired Union Envelope Co., Richmond, Va.; Burgess Envelope Co., Chicago; Coast Envelope Co., Los Angeles; and the wholesale paper merchandising facilities of Western Newspaper Union.

NOW IN **1** OPERATION

LITHOGRAPHING AND
PERFORATING
ON YOUR OFFSET PRESS

with

Litho-perf
PAT. NO. 2,842,202

THE NUMBER ONE trouble-free perforating and printing operation today is contained in two words—LITHO-PERF. Quality conscious pressmen whose customers insist on flawless perforations are never without the handy dispenser box that bears the familiar green and black LITHO-PERF on the label.

Applied directly to the impression cylinder (around or across), simply cut off the required amount from the box and remove the paper backing. With the coating of adhesive on the back LITHO-PERF is held firmly to the guide line.

With its steel band of precision-made teeth—only the paper is needed to start producing profitable perforations with your regular printing run **SIMULTANEOUSLY**.



Litho-Perf comes in six foot strips in a dispenser box, \$5.40, tape included. Also available in 20 foot lengths, tape included, \$16.20.

Other Precision-Made
Quality Products by H. S.
Boyd Company
Litho-Slit Litho-Punch
Litho-Snap Litho-Score



H. S. BOYD COMPANY
4915 E. 14TH ST.
TULSA, OKLA.

SOLD BY LEADING SUPPLY HOUSES

Offset Newspaper Survey

A national survey of the trend toward offset by newspapers was reported at the recent annual convention of the Pennsylvania Newspaper Publishers' Association by Joseph G. Terry, manager, Newspaper Division, Wolf & Co. The meeting was held in Philadelphia.

Mr. Terry revealed that of the 80 publishers surveyed it was found that 20 percent had a reduction in the number of employment situations after turning to offset. However, while several noted the number of situations was the same, the average cost per employee was less.

The survey revealed that the greatest saving took place in composition. However, the cost of camera work is reported to be a great deal higher and requires more skill. On the other hand, the cost of maintaining typesetting machinery under letterpress was reported greater by 58 percent, as compared with offset.

Under the heading of "Public Reactions," 86 percent stated that advertisers prefer offset to letterpress. Furthermore, the publishers reported that 90 percent of their readers prefer offset to letterpress.

Mr. Terry went on to point out that the majority of advertisers prefer standard size, whereas the majority of readers prefer tabloid. He stated that the newspaper going offset, which can print standard size, might obtain better advertising results.

The study revealed that the Harris press is used by 45 percent of the newspapers replying. However, the trend for larger newspapers is to the web-offset press. Seventy-one percent of the publishers own their press equipment, 54 percent of which are web presses. It was noted that 74 percent of the newspapers that own equipment to work for other publishers.

The majority of the publishers also indicated that improved working conditions were achieved by switching to offset. Moreover, a superior product is produced by offset, according to 92 percent of the replies, and an increase in profit was reported by 80 percent of the publishers.



Sun Chemical's new Corporate Research Center in Carlstadt, N. J. is housed in this 190,000 sq. ft. plant. The modern center was formally opened November 14.

Sun Opens Corporate Research Center

A CORPORATE Research Center, devoted to long-range investigations in synthetic organic chemistry and the discovery of new uses for polymers in printing inks, chemical coatings and paints, was opened last month by Sun Chemical Corp. in Carlstadt, N. J.

At the formal opening of the center on Nov. 14, ML, along with other members of the business and trade press, was conducted through the 190,000 sq. ft. facility, during which Sun technical representatives pointed out several complex research devices and explained their uses.

In addition to the research center, the new plant, which is located about 10 miles from New York City, will house Sun's Graphic Arts Laboratory and its Graphic Arts Standardization Laboratory.

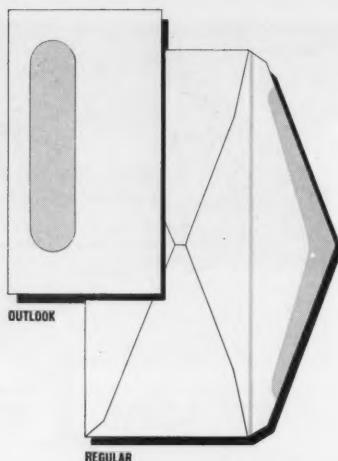
Equipped with the latest research instruments and analytical equipment, the center has an infra-red spectrophotometry department, a complete optical and electron microscopy section, an experimental press room where newly developed lithographic, gravure, flexographic and letterpress inks will be tested, and a science library.

Initial projects to be undertaken at the center include research into the synthesis of new resins for printing inks, and research projects for the U. S. Government.

Space is available in the center for anticipated expansion in the near future. In addition, a 5,000 sq. ft. building on the center's grounds will soon be equipped as a pilot plant for testing products and processes developed at the plant.

A Sun scientist uses a recording spectrophotometer to measure colors. The complex instrument "fingerprints" colors to assure standardized shades for printing inks.





Why are printers everywhere switching to **Epic* Executives, Regular & Outlook***

Several months ago, United States Envelope introduced an entirely new line of executive style envelopes — Epic Executives, Regular and Outlook. These envelopes were designed to meet the needs of modern business communication . . . and to provide an envelope that printers, large and small, could print and sell profitably to their customers.

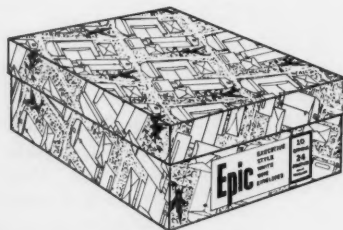
Response to Epic Executives has been very good. Many leading paper merchants are already stocking the new line. To date, more than four thousand printers of all sizes have tested the new envelope on their presses. Their reaction, with few exceptions, has been enthusiastic.

Comments such as, "It's the whitest envelope I've ever seen," are typical of printers' reactions to Epic Executives' super bright white stock and the way it snaps up fine printing.

COMPLETE, PROFITABLE LINE. Epic Executives are made in a complete line of the most widely used business sizes in Regular and Outlook window styles. The executive style flaps and seams have a modern, prestige look that appeals to customers. Best of all, Epic Executives are priced right to keep printers competitive and profitable.

EPICS ON THE PRESS. Press performance is another point printers like. The flatness and uniformity of

Epic Executives help eliminate problems on the press, as well as assuring printers' customers of smooth operation on their automatic inserting and metering machines. And printers found that make-ready and feed setting are no problem with Epic Executives.



MODERN PACKAGING. Epic Executives are packed in a new, distinctive DEEP LID BOX that speeds up printing because the envelopes can be fed directly into the press from the deep-lid cover, and then repacked ready for shipment. Helps customers, too, with inserting and metering.

If you haven't tried Epic Executives, Regular and Outlook, you're missing out on the most important envelope development in years. Check with your paper merchant today for complete information or write to Sales Promotion Department.



UNITED STATES ENVELOPE

GENERAL OFFICES: SPRINGFIELD 2, MASS. • WORCESTER • SPRINGFIELD
HARTFORD • ROCKVILLE • NEW YORK • METUCHEN • ATLANTA • INDIANAPOLIS
CHICAGO • WAUKEGAN • DALLAS • LOS ANGELES • SAN FRANCISCO

*T.M. Applied for by U. S. Envelope Co.

P-78

Buffalo Litho Sold

The sale of the Buffalo Lithograph Co., Inc., 23-year-old Buffalo printing concern, to Raymond LaRusch and Richard K. Terry by Douglas McClive has been announced.

The company will continue to operate under its present name in the same quarters at 1200 Niagara St. Mr. LaRusch has become president and secretary of the company and Mr. Terry, vice president and treasurer.

To increase the firm's productive capacity, new camera and plate making equipment have been ordered, as well as additional press equipment.

Mr. LaRusch has had 25 years experience in the printing industry, most recently as vice president and plant supervisor of Mohawk Litho, Inc.

Mr. Terry has spent the past ten years in sales work and was once sales manager of Mohawk Litho.

West Coast Exhibit Set

More than 100 Western suppliers of graphic sales equipment will show their products and services for advertising and sales executives at Graphics 62, a trade exposition which opens in Los Angeles next February in the Shrine Exposition Hall.

Printing and lithographing firms, packaging specialists, designers, paper mills, creators of sales aids on films, and specialists in typography, plate-making and binding will be among the exhibitors who will set up shop at the Shrine during the four-day show.

Graphics 62 will be produced by the B-M-W Corp., which staged Westprint 61, a printing machinery exposition, early this year.

Haynes Appoints Brink

Paul L. Brink has been named Eastern Division sales manager of Haynes Lithograph Co. He will continue to make his office in New York, but will also supervise sales activities in the Philadelphia office.

Mr. Brink has been in the lithographic trade since 1948 and joined Haynes as a salesman four years ago.

ALA Boosts Defense Fund

DELEGATES to the five-day convention of the Amalgamated Lithographers of America, which was recently held at the Hotel Deauville in Miami Beach, Fla., voted to boost their defense fund's reserves to a total of \$2 million, and increase weekly strike benefits from \$35 to \$45 a week.

Citing "the actions of anti-union lithographic management attempting to encircle us by litigation with a view to eliminating our security clauses," the convention unanimously adopted the resolution which declared that an increased defense fund was needed in the face of the employers "clearly indicating their intention to wage war on us."

The \$2 million represents a \$750,000 increase in the maximum amount in the fund. The minimum will be \$1,500,000, which was increased from \$1 million. When the ALA defense fund reaches the minimum figure, an assessment automatically goes into

effect until such time as the maximum figure is again reached.

Delegates in voting an increased defense fund, which will also be voted on in a referendum by the entire membership, were reacting particularly to the use of the Landrum-Griffin Act by the Lithographers and Printers National Association in an effort to have "hot cargo" provisions in the ALA contracts declared illegal.

By acclamation, the convention nominated the present incumbents for reelection for two-year terms. The membership will vote on the nominees in a referendum.

Headed by Kenneth J. Brown, a Canadian, who is the youngest president of an international union, the other officers nominated are Donald W. Stone, of New York, for secretary-treasurer; and as vice presidents, Arthur W. Brown, of Toronto; Gus Petrakis, of Racine, Wis.; Jack H. Wallace, of Kansas City; and Theodore Brandt, of Los Angeles.

Midstate Marks 25th Year



Midstate Offset Printing Corp., Syracuse, celebrated its 25th anniversary on Nov. 2 with a party at the University Club in Syracuse. A highlight of the occasion was the cutting of the firm's birthday cake by Sharon Branigan, who is "Miss Syracuse of 1961." Assisting her are, l. to r., Roland Briars, Midstate president; Jack Williams, vice president; and treasurer Vern Harrison. Midstate employs 48 persons.

A message to progress-minded lithographers

HOW MANY HATS DO YOU WEAR?

Plenty, we'll bet! It's enough to give a man ulcers, trying to be an expert in all the fields of lithographic management. Even the best business "team" has some areas of weak administration...areas where they lack experience or "know-how" or talent.

What's the answer? Just this: join the National Association of Photo-Lithographers. In every field of management -- cost control, sales, labor, production techniques, taxes -- the NAPL can help you find the right answer to set your business on the path to better profits. What's more, you'll have the advantage of association with the men in management of the most progressive lithographers across America.

Clip the coupon below. We'll send you complete information on what membership in the NAPL can do for you...how little it will cost.

National Association
of Photo-Lithographers
230 West 41st Street
New York 36, N. Y.

OK! Mail me the pitch on the NAPL.
Tell me what it will cost...what I
get...who belongs in my area.

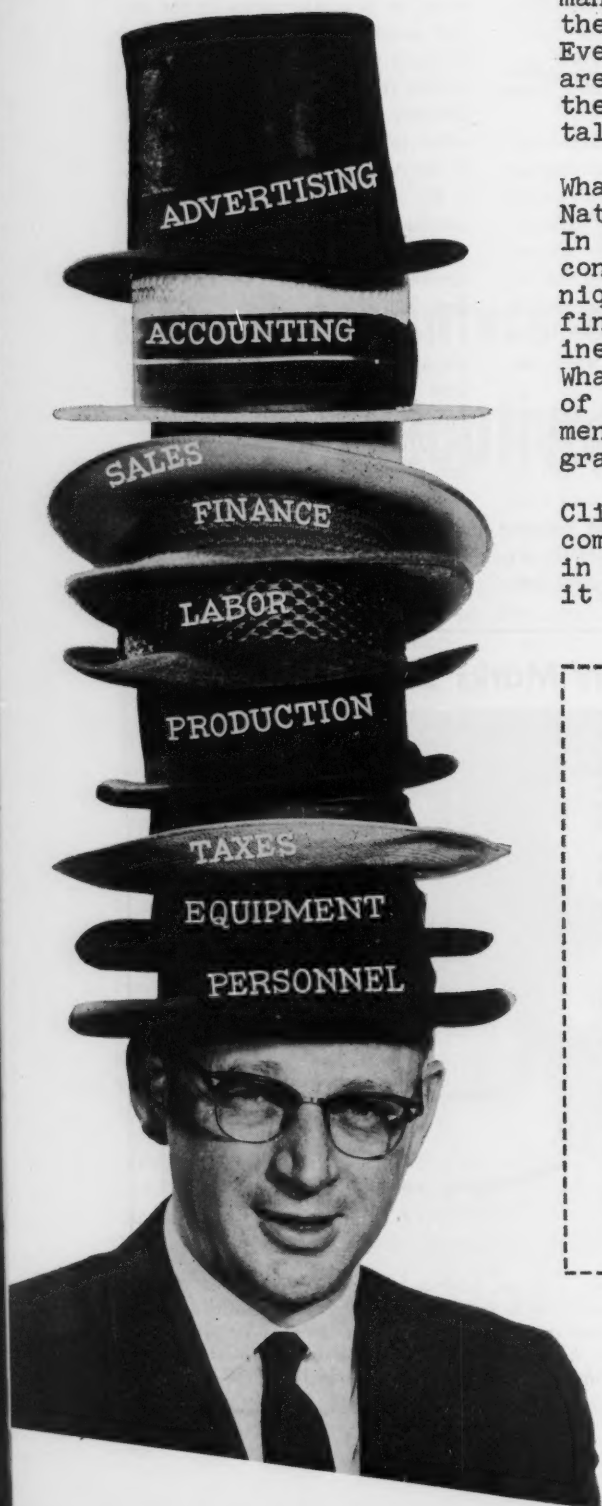
Name _____ Title _____

Firm _____

Street Address _____

City _____

Zone _____ State _____



Ideal Acquires Dickson

Ideal Roller & Manufacturing Co., Chicago, has announced the purchase of the Harry Dickson Co., San Francisco. Terms of the transaction were not disclosed.

Ideal reports that Harry Dickson has been made Pacific Coast sales manager and will be stationed at Ideal's Huntington Park, Calif. plant. According to R. H. Neale, manager of the Pacific plant, the acquired San Francisco facilities will be moved to larger headquarters at 1141 California Dr., Burlingame, Calif. Donald Hardy will supervise operations there, assisted by Richard Dickson, both of whom were employed by the Harry Dickson Co.

Buffalo Firm To Expand

Preparing for an expansion and relocation program, Baker, Jones, Hausauer, Inc., of Buffalo, have announced the realignment of its management staff.

President George I. Heffernan has been named chairman of the board of directors, and executive vice president Robert B. Bolles has been named president.

Karl F. Hausauer, former chairman of the board and now in retirement, made the announcement and added that long-range expansion plans include "high speed offset color printing facilities and new company quarters."

Williamhouse Buys Castle

Williamhouse, Inc., New York, fine paper converter and manufacturer of greeting cards, has acquired Castle, Ltd., of Los Angeles, a manufacturer of greeting cards. Terms of the purchase were not disclosed.

Castle, which was founded in 1949, will operate as a Williamhouse subsidiary.

Onondaga Opens Offices

The Onondaga Litho Supply Company, Inc., distributor of lithographic supplies and equipment in Upstate New York, unveiled its new Syracuse headquarters during a two-day open house Nov. 14-15. New 7,000-sq. ft. building is located at 101 Graphic Drive in Industrial Park.

Rosback Automatic Equipment

SAVES 41%

As Compared to Former Method of Inserting and Feeding.

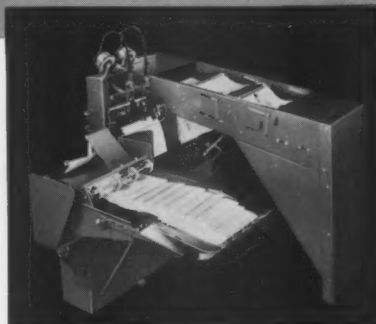
On Recent Installation of Auto Stitcher, Auto Feeder and Signature Inserter; Mr. Rufus M. Darby of Darby Printing Company writes as follows:

To say that we are highly pleased with both the inserter and the Auto-Stitcher is an understatement. A detailed time study and cost analysis has shown that this equipment reduced our inserting and stitching cost 41%. Frankly, the equipment has exceeded our expectations.

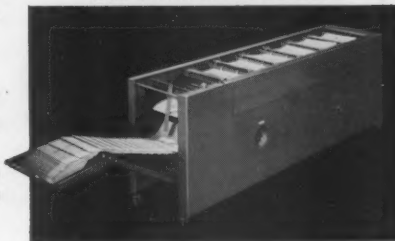
3 Operators will do work of 8 on Inserting and Stitching 6 Signatures and Cover. Speeds up to 4000 books per hour as compared to 8 Operators running 1500 to 2000 per hour on conventional equipment!

This combination cuts Stitching, Inserting and Feeding Labor Costs in half.

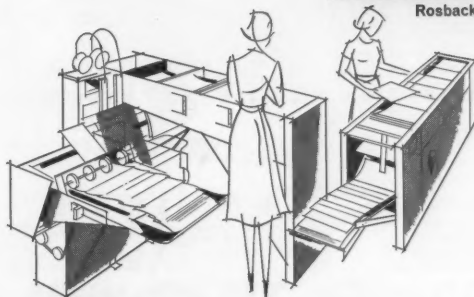
- Versatile and Flexible
- No runs too small or too large
- Entire package costs less than hand fed gang-stitcher
- Inserter Model 605 12 x 18 size for inserting tabloid newspapers



Rosback Auto-Stitcher and feeder



Rosback Signature Inserter.



Write for further information and literature, no obligation.

Rosback®

F. P. ROSBACK COMPANY
Benton Harbor, Michigan



THE IDENTITY OF ST. LAWRENCE OFFSET ENAMEL IS PLURAL!

Dazzlingly Good Looking Flattering To Color

A High-Speed Runner A Quick, Quick Dryer

PERFECT FUSION WITH INKS/PERFECT HARMONY WITH ART AND DESIGN
St. Lawrence Offset Enamel by Newton Falls is ALL—
and a budget-saver on volume runs to boot.

NEWTON FALLS PAPER MILL, INC., 330 WEST 42ND STREET, NEW YORK, N. Y.

MILL AT NEWTON FALLS, NEW YORK



Champion Names Gard

George W. Gard has been named special assistant to the vice president—group executive of the recently formed Special Products Div. of Champion Paper Co., Hamilton, O.

Mr. Gard was formerly president of Mid-West-Pak, and Crown Plastic Cup, which are Champion subsidiaries. He is succeeded by David T. McLaughlin, former special assistant to the president of Champion.

Dunkel Names Freeman

Paul A. Dunkel & Co., Jersey City, N. J., has appointed William C. Freeman as president. He was formerly president of Clarence Morgan, Inc., which is affiliated with the Dunkel Co.

Ohio Newspapers To Offset

Central Ohio Publishing Company, London, O., has begun web-offset production of the daily *Madison Press*, and weekly *Plain City Advocate* on a Vanguard newspaper press.

C. Carlton Hartley, publisher, reports that frequent use of spot color on pages of the *Madison Press*, daily circulation of 5,000, and the *Advocate*, with circulation of 3,000, led to the purchase of the press.

Conversion to web-offset means that Central Ohio's operations will change to all photocomposition and, with the addition of plate making equipment, the firm will make its own plates. Both papers were printed previously by letterpress.

Lehigh Awards Fellowships

Recipients of five Fellowship Awards for advanced study in graphic arts and related fields for the 1961-62 academic year have been announced by Lehigh University's Graduate School, Bethlehem, Pa.

The fellowships, established for graduate research in physical chemistry, are administered by Dr. Albert C. Zettlemoyer, Professor of Chemistry and Research Director of the National Printing Ink Research Institute.

Winners of three fellowships granted to Lehigh for fundamental research relating to printing ink are

Joseph J. Hammel, of Allentown, Pa., awarded The Sun Chemical Corporation Fellowship; David R. Bassett, also of Allentown, the Howard Flint Fellowship; and Harold D. Stanley, Jr., of Chicago, Ill., Louis Calder Foundation Fellowship.

Graduate Assistantships for printing ink research have also been awarded to Nicholas Halkias, of Philadelphia, and Anthony Butto, Carlisle, Pa., both graduates of Pennsylvania State University.

Jarrold Wins British Award

Jarrold & Sons, Ltd., of Norwich, England, has been nominated the winner of the "Photo-Litho & Offset Award, 1961," sponsored by *The Litho-Printer* of London.

At a recent meeting of publishers, print buyers and printers at Monotype Corp.'s London office, John Jarrold, chairman of the winning company and this year's president of the Federation of Master Printers of Great Britain, received the award.

PRECISION AT A PRICE



nuArc JET LINE STRIPPING TABLES

WITH EITHER HORIZONTAL OR VERTICAL MOVING STRAIGHT EDGE

For jet fast, accurate ruling, opaquing, layout and stripping, the JET LINE Table has no equal . . . at any price. Why buy a light table when for a few more dollars you can own the all-purpose JET LINE.

All moving parts are precision machined and aligned at the factory. Straight edge assembly rides accurately and effortlessly on a heavy duty rack and gear mechanism. All calibrations are in 1/8".

Tables incorporate nuArc's famous light table lighting system and many other features you would expect to pay much more for. nuArc quality means reduced "make-over" . . . better and more efficient reproduction.

**THREE SIZES: 24 x 31—\$395
31 x 41—\$495 • 43 x 52—\$795**



nuArc

AS LOW AS **\$395** 24 x 31
OTHER SIZES BELOW

Send for Bulletin A375 ML

nuArc

another BUILT-RIGHT PRICED-RIGHT product

COMPANY, INC.

General Office and Factory:
4110 W. Grand Ave. • Chicago 31, Ill. • U.S.A.
Sales and Service: New York • Los Angeles

NEW nuArc JET

FORMICA TOP WORK TABLE

LOCKING DRAWERS FOR EACH MAN ON EACH SHIFT



COMPANION

THREE DRAWER STORAGE CABINET

TOP 28 1/2 x 34 1/2, 36" HIGH
DRAWERS 28 x 25 x 6 1/2" DEEP

Report On Offset Newspapers

The October Bulletin of the Pennsylvania Newspaper Publishers' Association contains a report on how a weekly operation uses the offset method to print six newspapers.

Although the name and location of the weekly newspaper group is not given, PNPA said that the report comes from the Research Institute of the American Newspaper Publishers' Association, which is located in Easton, Pa.

The report states that this plant

publishes six weeklies with a total of 720 tabloid pages. Total circulation of the papers ranges between 48 and 50 thousand.

Techniques involved in producing these papers are as follows: "Type is set for text and classified on four teletype line-casting machines. All pages are made up in forms except advertisements and, after all corrections are made, page proofs are pulled.

"Production proofs, velox prints or masks are then pasted down on the proof sheet. When a mask is put

down, the halftone negative is stripped in on the full page negative before printing down on the offset plate. This type makeup permits an even flow of pages through the composing room.

"Made up pages then go before the camera. After page negatives are made, they are opaqued and, if necessary, halftone negatives are stripped in. Four tabloid pages are then laid out on a flat in register with each other. These pages are printed down on a whirler coated zinc plate."

After the plate is developed and gummed up, the long edges of the plate are given 90 degree bends for locking up on a four-unit web perfecting publication press.

Quality newsprint is used that has less paper dust, is a cleaner and brighter sheet, and gives a better printed paper. The amount of paper waste experienced at this plant is approximately 10 per cent. This figure includes wrapper, handling and transit, white-press, core and printed waste.

McCosh Named Director

William C. McCosh has been named director of marketing for National Carbon Co., Division of Union Carbide Corp., New York. He succeeds Curry E. Ford who was recently appointed director of development for the company.

Mr. McCosh has been with National Carbon since 1939.

Stark Printing Expands

John S. Stark Printing Co., St. Louis lithographers and letterpress printers, has announced the completion of a remodeling and expansion program.

Increased production facilities to accommodate larger printing orders have been installed in the company's Freeburg, Ill., plant, which has 10,000 square feet of floor space. In addition, the company is now offering complete customer services with the expansion of creative art, composition and bindery facilities.

The company, which began operations in 1946, employs 75 persons.

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SUSQUEHANNA

LTF Forum Plans

More than 80 members attended the November 3 meeting of the Susquehanna Litho Club. Following the dinner, club president Fred Musson asked for a report on the LTF Forum plans. Mr. Walsh, who is in charge of the preparations for the forum, reported that promotional mailing pieces were under production.

After Mr. Walsh's report, the club devoted the rest of the evening to round table discussions. The following persons moderated the discussions: art & camera, Warren Foley, of Litho Craft, Inc., and Frank Yeager, of Lebanon Valley Offset; stripping & platemaking, John Chura, of Executive Service Co., and Robert Ganter, of Lebanon Valley Offset; paper, press & ink, Richard Kelly, of Thomas Price Co., Frank Ferrigno, of Lithco, and Ben Clerico, of Glenn Killian Color Co.

LITHO CLUB NEWS

N. Y. Conducts "Lick the Hickey" Program

ON Oct. 25, 150 members and guests attended the N. Y. Litho Club's meeting entitled, "Lick the Hickey Night."

Heading the anti-hickey campaign were John Kronenberg, of S. D. Warren Company; Norman Rowe, of Ideal Roller Mfg. Co.; and Theodore Makarius, of Pope & Gray Ink Co.

Mr. Kronenberg began his talk by defining hickies as "specks in the print" and listing the causes as pits in paper, blankets or plates; lumps

in paper or on blankets; pick-outs; loose surface dust; dampener shedding; spray; or simply dust. He said that, if stock is pitted, there will be no definite pattern from sheet to sheet. If pick-outs are occurring, there is a definite weakness in the paper. In both instances, he continued, the only real cure is replacing the paper. On the other hand, paper picking (lifting the coating from the fibers) can sometimes be eliminated by reducing the ink tack and taking the tack out of the blankets with various commercial preparations.

Mr. Kronenberg went on to say that loose surface dust between sheets is another major hickey problem, since the dust transfers to the blanket which prevents the ink from reaching the paper. A press equipped with vacuum cleaner apparatus can lick this problem, Mr. Kronenberg said. Otherwise, the pressman has no recourse but frequent blanket washings. Many in-plant dust problems, he observed, can be eliminated by general cleanliness, sharp cutting knives and dampener replacements.

Norman Rowe stressed the importance of new and clean rollers in combatting the hickey problem. He suggested that the aging and crumbling of rollers could be delayed by the judicious use of washup solutions two or three times a week, to eliminate hard ink film or glaze on rollers. When the use of washup solution is no longer successful, rollers should be reground. "Prevention," said Mr. Rowe, "is the best cure for the hickey problem."

Mr. Makarius blames the modern

(Continued on Page 111)

L. A. Presents First Scholarship



Initiating a program to award an annual scholarship to a student of the graphic arts in the Southern California area, the Los Angeles Litho Club this fall selected as its first recipient Kenneth J. Whitton, who is a freshman in the Don Bosco Technical Institute's lithography shop. Pictured with him are, left, Thomas G. Dalziel, L. A. Litho Club past president, who made the presentation, and the Reverend Louis Masoero, who is the principal of the vocational high school.

YOUNG LITHOGRAPHERS

Bergen Addresses YLA

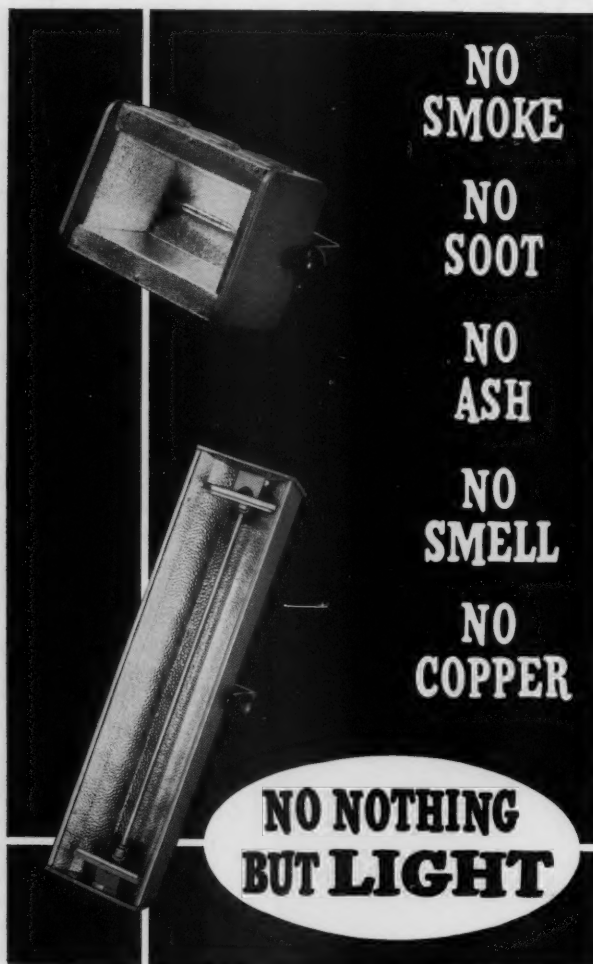
"How to Pay a Minimum of Taxes in Estate Planning," was the subject of Bernard S. Bergen's talk to the Young Lithographers Association on Nov. 8 at the Advertising Club in New York. Mr. Bergen, who has been in the insurance business 27 years and is one of the founders of the Brooklyn branch of the Life Underwriters' Association, distinguished in

his talk between legal tax avoidance and illegal tax dodging.

He went on to explain several ways in which taxes can be saved by long-range planning. In addition, Mr. Bergen emphasized the importance of having a will properly drawn up.

YLA will not hold a meeting in December. In January, however, Benjamin Robinson, ALA attorney, will address the group on labor-management problems, and at the Feb. meeting, John Kronenberg, S. D. Warren, will give a talk on paper.

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 ATLANTA: Rudolf Harper, 4 Adair St., Douglasville
 BALTIMORE: Walter Speyer, 400 N. Holliday St.
 BOSTON: Vincent Aliberte, 113 Oliver St., Malden
 BUFFALO: Walter Schmidt, 505 Pearl St.
 CENTRAL WISCONSIN: Harvey Fisher, R.2, Box 558, Lakeview Lake, Menasha
 CHICAGO: Eugene Bulinski, 7827 Cressett Dr., Elmwood Park 35
 CINCINNATI: Jack Kirst, 62 West Villa Pl., Ft. Thomas, Ky.
 CLEVELAND: William Nicholson, 1163 E. 40th St.
 COLUMBUS: Lloyd Brown, 1250 Fairwood Ave.
 CONNECTICUT VALLEY: Anthony Galeari, 115 Buritt Ave., Stratford
 DALLAS: Howard McKemie, 210 S. Poydras
 DAYTON: C. R. Young, Talbott Bldg.
 DETROIT: Harry Harrison, 29329 Rose, Madison Heights
 FORT WORTH: David Shipp, 220 Terry Rd., Hurst
 GRAND RAPIDS: Clarence Wuerfel, 209 S. Lafayette, Greenville
 HOUSTON: Edwin Organ, 551 W. Troy
 KANSAS CITY: Carl Clark, 301 W. 17th
 LITTLE ROCK: Miss Marian Smith, 1000 Center St.
 LOS ANGELES: Michael Aguilar, 2501 W. 171st St., Torrance
 LOUISVILLE: Donald Lyons, 118 W. Chestnut
 MILWAUKEE: Henry Reger, 3302 S. Adams Ave.
 NEW YORK: Marcel Minardi, 39 Chambers St.
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 ST. LOUIS: Frank Grob, 3644 Forest Pk.
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 TWIN CITY: John Gawlik, 3845 Georgia Ave., N. Minneapolis
 WASHINGTON, D.C.: Frank Conway, 7708 Barto Ave., S.E., Camp Springs, Md.

DETROIT

Color Proof Demonstration

Richard Fitzpatrick and George Lewis of the Minnesota Mining and Manufacturing Co. presented a talk on and live demonstration of color key proofs at the November meeting of the Detroit Litho Club. Included in the demonstration was a negative-acting pre-press color proof that can be processed and ready for viewing in 10 to 15 minutes.

The following persons have been accepted into the club: Rex Drulard, pressman; William Wolne, stripper; Jack Mallen, dot etcher; and Roy Knight, of Associated Graphic Supply, who was accepted as an associate member.

CHICAGO

Club Officers Selected

At its November 16 meeting, the Chicago Litho Club selected its officers for 1962. They are Richard F. Boever, of Coburn and Co., president; John L. Jachimiec, of Container Corp. of America, first vice president; William L. Byers, Consolidated Water Power and Paper Co., second vice president; Wayne E. Schmuhl, of the Lithographic Technical Foundation, treasurer; and Eugene C. Bulinski, of the Chicago Lithographic Institute, secretary.

More than 200 members and guests of the Chicago Litho Club attended the October plant tour and educational meeting, which was held at the Inland-Magill-Weinsheimer Co. Richard Dunbar, who is general superintendent at Inland, along with his assistants, guided the visitors through the plant.

Included in the tour were visits to the camera, art, stripping and plate-making departments, the pressroom and the bindery. Special emphasis was placed on the equipment used in the bindery to produce patent or perfect bindings, automatic folders and saddle stitchers, gathering and side wiring.

Of particular interest to the visitors were various kinds of finishing equipment attached to the web-offset

presses. Each of the three web presses was producing a different type job, with a different type finishing or folding operation taking place. Included was a single web former folder and cut-off, which was producing an eight-page signature brochure. Another press was running two webs, slitting the web into ribbons, gathering the ribbons and double folding them to produce multiple signatures. The third press was running a single web, slitting the web and producing multiple double-folded signatures.

BALTIMORE

Color Matching Discussed

Robert Schoen and Benjamin Clerico, of the Glenn-Kilian Color Co., gave talks on color matching techniques at the Oct. 23 meeting of the Baltimore Litho Club. The speakers concentrated on new methods for overcoming color matching problems in sales, art and production.

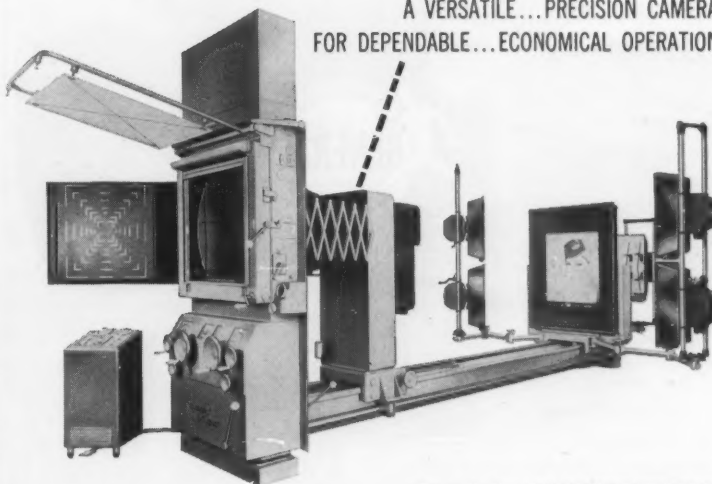
The club will hold its annual Christmas Party on Dec. 16.

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BUFFALO

Shop Procedures Discussed

Shop procedures were reviewed at the Nov. 6 meeting of the Buffalo Litho Club, held at MacDoel's Restaurant. Several speakers discussed plant problems and techniques. They included Tom Nantka, of Sidney Thorner Press, who spoke on customer services; Fred Hoelperl, of Stecher-Traung, discussing dot etching and color; Lou Gruber, of F. N.

Burt Co., who reviewed plate problems; and Norman Bernhardt, of Niagara Lithograph Co., who discussed general procedures.

WASHINGTON

Business Management Talk

Willard Brown, vice president of Judd & Detweiler, was the featured speaker at the Oct. meeting of the Washington Litho Club. Mr. Brown discussed the problems that are en-

countered in trying to achieve sound and efficient business management. He also described the two multi-color web-offset presses that his company recently installed and is now operating.

The following members were inducted into the club: Gary L. Grigsby and Harvey Fitting, of the U. S. Government Printing Office; William H. Shields Jr., of Mead Paper Co.; Thomas P. Glacken, of U. S. Printing Ink Co.; and James A. Hawkins, of Eastman Kodak Co.

DAYTON

Murphy Addresses Club

At the November meeting of the Dayton Litho Club, at which past presidents of the club were honored guests, NALC president John W. Murphy addressed the group on "Communications Within Our Industry."

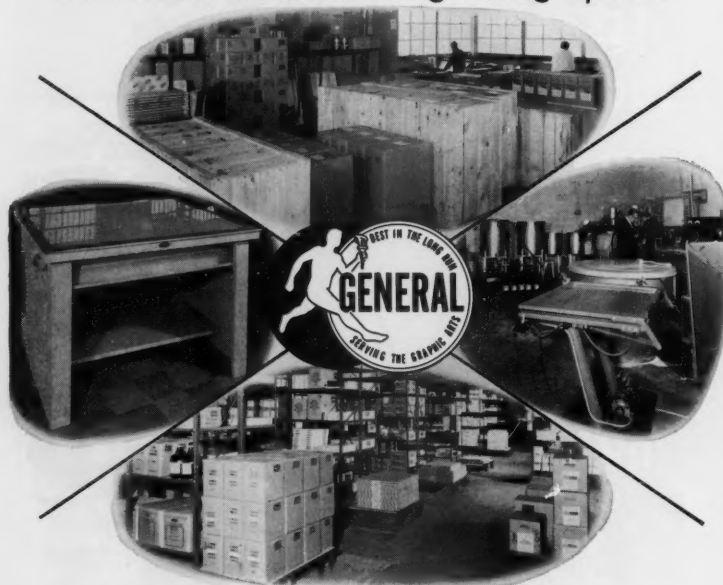
Mr. Murphy emphasized the need for continued improvement in communications within the entire graphic arts industry, particularly in the expanding lithographic field. He went on to point out that new developments and techniques can contribute to the continued overall growth of lithography only if they are widely disseminated.

TWIN CITY

"Employer's Night" meeting was held by the Twin City Litho Club at the Calhoun Beach Hotel on Nov. 2. Featured speaker was Dr. William S. Howell, of the University of Minnesota. Mr. Howell's address was on "The Power of Persuasion." An author of two college textbooks, entitled *Discussion* and *Persuasion*, Mr. Howell described various techniques that can be used by an employer to inspire incentive in employees and to help in various sales promotion activities.

A new member of the club is Ronald Hendricks. Associate members also initiated at the Nov. meeting are Walter Davis and Richard Crawford.

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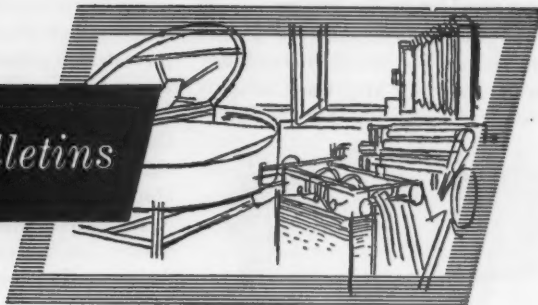
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Equipment, Supplies, Bulletins



Edge Guide For Webs

Hurletron Inc. has introduced a transistorized edge guide designed for a wide range of applications where accurate positioning of the edge of a moving material is essential. The device, called the Model 182 Edge Monitor, can be used in printing plants, papermills, and other industries where processed material is handled in rolls or webs.

The Edge Monitor senses lateral deviations as small as .001 in. on webs or rolls traveling at 50 to 2000 ft. a minute. Tolerances are easily adjusted from 0 to 1/2 in. with a knob and set screw. Installation is inexpensive since the Edge Monitor mounts on a standard 3/8-in. pipe and uses stand-

ard 115V 60 cycle AC power.

The Edge Monitor consists of a scanner, amplifier, control relays, and power supply. In the scanner, light shines on two photocells through two narrow slots. The slots are parallel to the edge of the moving web. When the web is running normally, one slot is shaded, the other illuminated. If the web moves from its proper position, it uncovers the normally dark cell, or covers the normally illuminated cell. Pulsing relays then signal the side guide mechanisms to move the web back to position.

Additional information may be obtained from Hurletron, Electric Eye Equipment Div., 1938 E. Fairchild St., Danville, Ill.

Polaroid Screening Device

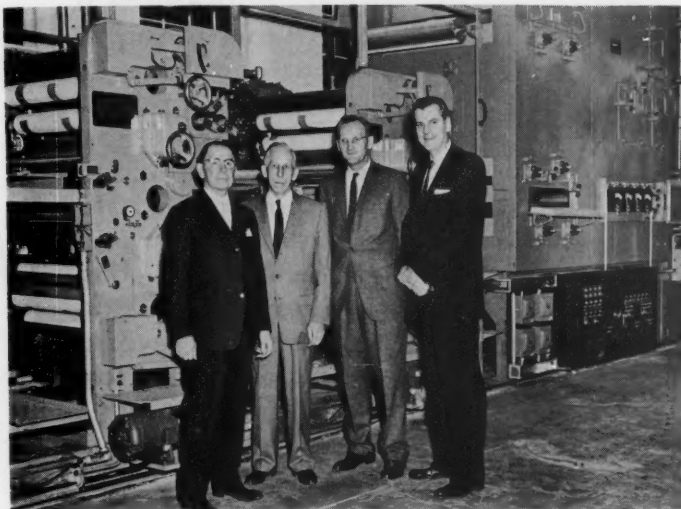
A device to screen Polaroid positive prints as they are made in the camera has been developed and is now being produced by Instant Photoscreen, Inc. According to the manufacturer, the screened prints may be mounted on a mechanical with type and line art and a complete page negative can be made with one exposure.

Instant Photoscreen, which is not associated with the manufacturer of the Polaroid camera, also announced that it hopes to develop similar screens for other cameras.

At the present time, two kits are being produced for the polaroid, one with three screens, the other with five screens. The three screen kit will include 85, 100 and 120 line adapters, and the five kit will also have 65 and 133 line adapters.

Additional information may be obtained from the company, 1329 Stanley Ave., Dayton 4, O.

Baugham Installs 8-Color Web Press



Officers of The Baugham Co., Richmond, Va., are shown here on an inspection tour of the company's new press, an eight-color, four-unit ATF web. They are, left to right, Greer Boatwright, vice president; Gordon Bins, secretary-treasurer; Leo Napotnik, president; and Kermit Cavado, vice president-sales. The new press will print both sides of a roll in four different colors, at 25,000 impressions an hour.

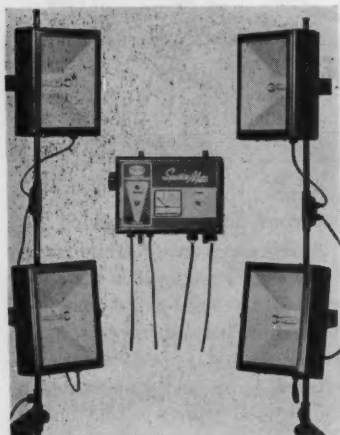
Di-Noc Develops Film

Di-Noc Chemical Arts, Inc., Honeoye, N. Y. is producing a plastic base ortho film for the graphic arts called "Copy-Lith". The film is primarily designed for black and white line and contact reproductions, but also has the required characteristics to be used in place of water proof negative papers, according to Di-Noc.

The company reports that it has been developing Copy-Lith for two years under the name of Experimental Product "C". Cameramen throughout the industry have experimented with the film, using it under various conditions. Experimental results, the company reports, have been encouraging. Additional information on the film may be obtained from Di-Noc.

Camera Lamps By Brown

A quartzline incandescent photo lamp system has been introduced by the W. A. Brown Mfg. Co., Chicago. The company reports that the lamp



Brown's quartzline photo lamp system is suitable for every type copy-camera production, ranging from black-and-white newspaper engravings to high-quality lithographic color plates.

According to the company, the

lamps have long life and the replacement cost of the tubes is about 40 percent less than for competitive makes now available in the U. S.

Called "Brown Spectra-Matic Camera Lamps," the system is designed around a quartz-iodine tube about half the length of quartzline counterparts now on the market. The smaller size has enabled the firm to design a reflector which gives greater utilization of lamp output, without the physical size of the reflector being objectionable. The new system operates at normal line voltage.

For complete specifications, write to W. A. Brown Manufacturing Co., 4000 Prudential Plaza, Chicago 1, Ill.

Web Guide Manual

An eight-page technical manual, entitled "Stanford Automatic Web Guides — 110 Series for Intermediate Guiding," has been prepared by Stanford Engineering Co. The illustrated manual features detailed information on automatic web guiding, principle of operation, models available, appli-

cations, construction and installation and maintenance instructions.

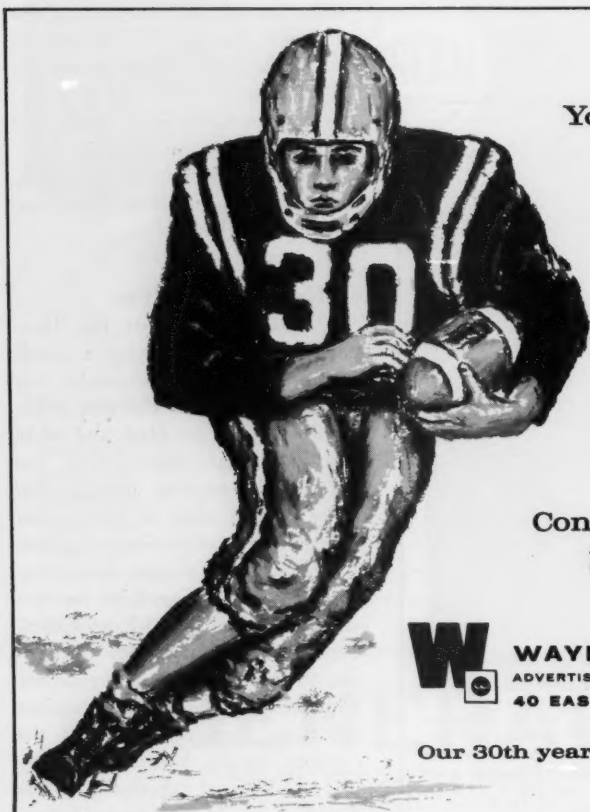
Stanford 110 Series Automatic Web Guides are designed for accurate web alignment at critical points of printing, coating, laminating, slitting and other web processes. The web guide is controlled by a sensing head which senses the web edge and shifts the cambered guide rolls to instantly correct any web deviation.

A copy of the manual may be obtained from the company, Salem, Ill.

Gummed Paper Samples

Ludlow Papers, a division of Ludlow Corp., has announced the availability of a sample book on its gummed papers.

A complete range of gummed paper samples are included, showing the variety of colors and finishes available in Ludlow label papers. In addition, information about selecting the proper adhesive is contained in the booklet. A sample book may be obtained from the company, Ware, Mass.



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Kreonite Graphic Arts Sink

Kreonite, Inc., has announced the development of its Model 3-40 Graphic Arts Sink for processing line



Kreonite's Model 3-40 processing sink.

and half-tone films up to 30 x 40". The sink features front-mounted, recessed operating controls and a built-in safe-light for inspection during developing.

The sink also has a removable translucent tray, an illuminated front control panel, built-in dial thermometers for recirculation and temperature blender and ample storage space. Overall dimensions are 52 x 113".

The company reports that the sink is also available with an additional

40 x 50" wash. Additional information may be obtained from the company, Box 2099, Wichita 1, Kan.

Lease Plan Announced

A 10-year lease plan designed to help the printing industry replace obsolete equipment has been announced by the Maryland Graphic Arts Association, Baltimore.

The plan has the following features: 10-year terms, no security deposit, level quarterly payments, preferred rates, and no restriction on use of equipment or on management operations.

To qualify, a company must have a tangible net worth of \$1 million.

Carolina Index Line

Riegel Paper Corp. has announced the addition of colored index to its family of Carolina Papers. Carolina Index is now available in six colors: buff, green, canary, salmon, cherry, and blue, as well as, super-white.

Sample books have been prepared and are now being distributed to Carolina merchants.

Step-And-Repeat Machines

A full line of Bouzard step-and-repeat machines, available in four sizes for both manual and automatic operation, is being distributed in the United States by Amsterdam Continental Types and Graphic Equipment, Inc.

Manufactured by the French firm of V. Bouzard-H. Calmels of Paris, the step-and-repeat machines have been widely used throughout Europe for label, stamp, packaging, electronic circuit and other repeat-image production, since their introduction more than three years ago.

Simple in design, with sturdy and rigid construction based on an integrated single casting, the Bouzard machines operate by a fully automatic punch-card system, by push buttons, or manually. Handwheel control can be set by reference to dials that measure thousandths of an inch. Mechanical counters indicate the travel of the chase housing in each direction.

Additional information may be obtained from the Amsterdam Co.; 276 Park Ave. S., N. Y.

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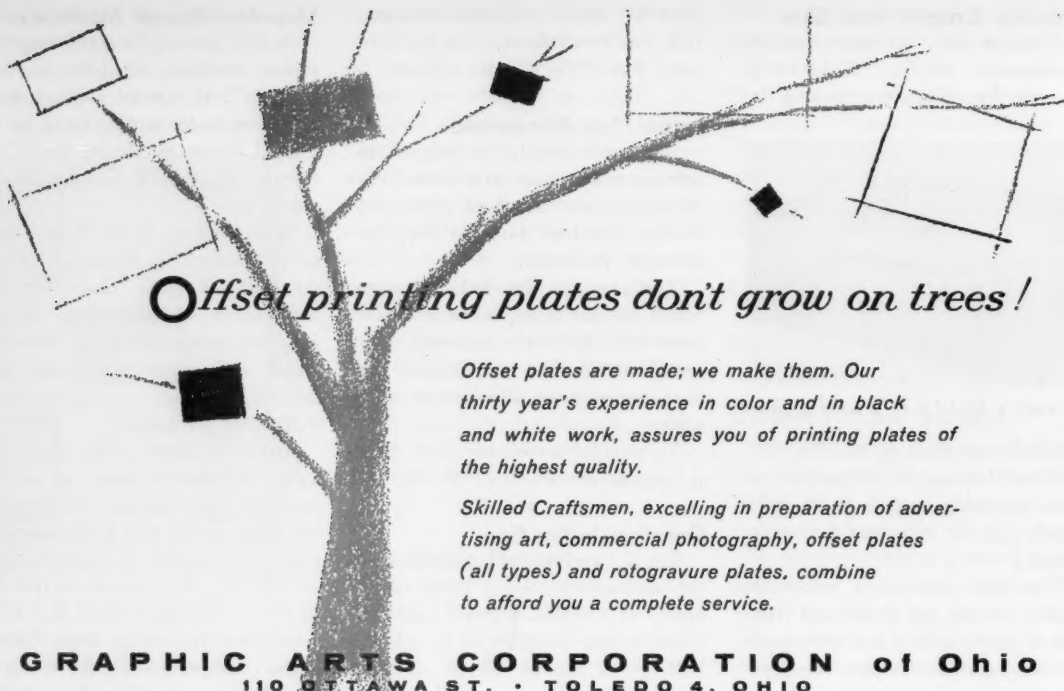
presses with Doyle Paper Cleaners keeps your paper stock and plates clean as a whistle. Sucks off all offset spray, paper dust and other loose material. As a result your press running time soars to new highs. Doyle Cleaners are used in many leading plants. They should be in yours, too. Write today for full details giving us your large press specifications.

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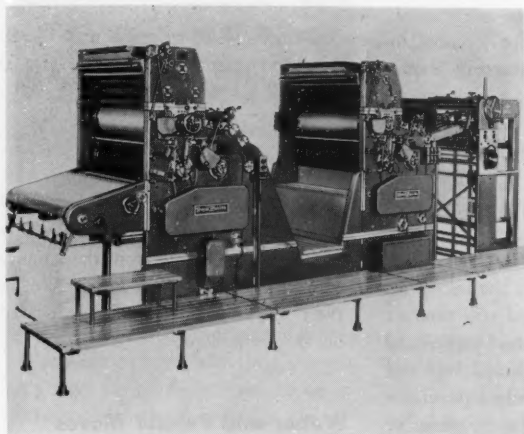


Royal Zenith Announces 2-Color Press

ROYAL Zenith Corp. has announced the introduction of a two-color offset press, that can produce 23 x 30" color work at speeds

side guides, pulsed tapes and automatic sheet slow-down have also been built into the press.

Outside press controls for close



Royal Zenith's two-color offset press operates at a speed of 8,500 sheets an hour or 17,000 iph.

up to 17,000 impressions per hour.

The press provides versatility by using the same plates as 30" single color presses. The compact design — only 7' 9" x 15" — incorporates the same features that appear on Royal Zenith's single color offset presses.

The inking system on each printing unit consists of 20 rollers of varying diameters, each riding on ball bearings. The main drive is actuated by precision-ground helical gears. Royal Zenith's stream feeder and three-point register control with pull

register cylinder adjustments on the second color unit, and the form rollers on both units, can be adjusted while the press is running. All feeder, feedboard, register and roller adjustments are made with knurled knobs; tools are not needed.

Complete details and specifications on the Royal Zenith Two-Color are available from the three offices of Royal Zenith Corporation: 180 Varick Street, New York; 619 W. Washington Blvd., Chicago; and 1350 South Broadway, Los Angeles.

Litho Pressman's Guide

Anchor Chemical Co. Inc. has issued a guide, called "Anchor Chemicals Maintain Top Quality Production," which contains information designed to guide the litho pressman in caring for his rollers, blankets and related important parts of the press.

The four-page booklet explains how to correct hickies, non-transfer of ink, streaking, set-off, static, skinning of ink, dirty dampeners, sticking of paper in feed and delivery and other problems. In addition, the guide discusses the health hazards and disadvantages of using harsh, toxic solvents and abrasives.

The guide may be had free on request to Anchor Chemical Co. Inc.,

827-837 Bergen Street, Brooklyn 38, N. Y.

Carbon Arc Lamp Brochure

A brochure describing its high intensity carbon arc printing lamp, which is designed to meet the requirements of small reproduction shops, has been prepared by The Strong Electric Corp.

Designated as the Strong 'Comet 45', the motordriven and automatic lamp is a completely self-contained unit consisting of transformer, timer, contactor, reflector, attachment cord and carbon storage area.

A copy of the illustrated brochure, which gives technical data on the lamps may be obtained from the company, 17 City Park Ave., Toledo.



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Truly fine quality. Available in 12 values, 133 and 150 line rulings, 20 x 24 in. reg. base film. 1 per tube. 110 & 120 line, A thru F

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118 2-color sheets in 3-ring binder with technical data. 195 precisely predictable colors per sheet \$22.50.



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Complete system, with instructions. P&R Machine, Manual, 1 doz. brass pins. \$99.50.

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Line Casting Justewriter

Friden, Inc., has announced the development of its Line Casting Control Justewriter which embodies in one unit all the elements necessary to prepare, correct, and duplicate code-punched, six-channel tape for controlling the operation of line casting machines. Codes in the tape will direct an automatic line caster to set and justify each type line, including the required spacing and quadding at the end of paragraphs.

The Justewriter LCC-S consists of a heavy-duty electric typing component, a tape punch for recording characters and functions, and a tape reader for automatically typing and punching from previously punched tape.

A proportional spacing mechanism is provided so that the typed characters have the same unit spacing values as the unit cut matrices used on tape-controlled line casting machines.

The LCC-S operator follows a simplified procedure to adjust line length and spaceband settings, with-

out the aid of tools. A front-reading scale indicates the exact measure at all times.

Additional information may be obtained from the company, 97 Humbolt St., Rochester 2, N. Y.

Litho Carton Inks

Crescent Ink & Color Co. has announced that it is marketing a complete line of high gloss, instant set non-rub carton inks, called Speed Spectrum Litho Carton Inks. According to the company, a printer can obtain any color or shade desired with a minimum number of Standard Spectrum Colors.

Crescent reports that the inks print solids free of mottle and will produce halftones that will stay sharp and clear. Additional information and technical data on the inks is available from any Crescent branch office, or directly from the firm's home offices at 464 N. Fifth St., Philadelphia 23.

Blueprint Folding Device

Baumfolder Division of Bell and Howell, Philadelphia, has announced

the development of a device that is designed to simplify and accelerate blueprint handling.

Called Printfolder Model 222, the machine is a three-station feed type device that permits varying sizes of blueprints to be fed into any of its stations.

Additional information may be obtained from Baumfolder Div., 1540 Wood St., Philadelphia 2.

Howard Moves Offices

Howard Paper Mills, Division of St. Regis Paper Co., has moved its Eastern Sales Office from the Empire State Building to 633 Third Ave. in New York. The new office is located on the 24th floor.

Weber and Permut Moves

Weber and Permut, Inc., consulting chemists in the graphic arts, have moved their offices and laboratories to larger quarters. The firm's new headquarters are located at 149 Grand St., New York 13.



2nd Big Printing . . . have your copy?

Yes, **The Magic of Making Halftones** has proved such a practical and useful handbook that word has gotten around that it is a really valuable book to have around the shop. Consequently, the entire first printing of 3,000 copies was sold out several months ago. But if you delayed too long in getting a copy, you needn't worry. You can get this valuable, profusely illustrated collection of tips and techniques once again . . . for a second printing of 2,000 copies is just off press! Many lithographers have written

to tell us how much they have profited from this authoritative work. It covers the complete subject of making halftones—tools, procedures, equipment, general rules and shop standards. Get your copy today by using the handy coupon below. The price is just \$4.25 a copy, shipped postpaid anywhere in the world. And you take no chances: Your money will be promptly refunded if you are not entirely satisfied after looking over 'Halftones' for 10 days.

• Scores of photos showing 'right' and 'wrong' • Working tools: where to buy them and how to make them • Setting camera • Focusing • Rescreening halftones • Shooting colored copy • Stripping • Platemaking • Special tricks

Litho Books

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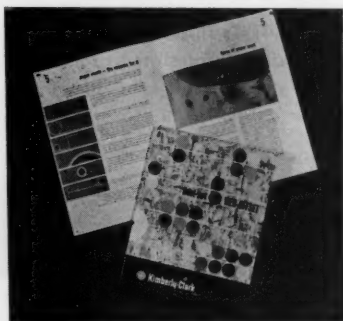
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Heat-Set Web Book

"Heat-set Web-Offset," the latest in a series of educational booklets for the graphic arts industry, has been



published by Kimberly-Clark Corporation.

The illustrated booklet is designed to provide printers and their customers with an up-to-date source of information on the advantages and savings available through web-offset printing. The booklet also is intended as a comprehensive reference work for use by printing salesmen, paper salesmen, paper buyers, specifiers of printing and students of the graphic arts.

The 48-page publication deals with pressroom problems and equipment as well as paper problems and requirements. Among the subjects covered are the advantages and disadvantages of the process, types of web-offset presses, press equipment and controls, and auxiliary press equipment.

Two chapters concern paper. The first discusses paper waste and the reasons for it, types of paper and basic requirements for web-offset printing. The second considers paper problems encountered on the press, such as delamination, pick, curl and web breaks, and suggests solutions.

Two charts show standard waste allowances established for web-offset printing, and a series of photographs portray some of the most common paper defects. The booklet also provides recommendations for efficient ordering of roll paper stock and a glossary of web-offset terms.

The booklet was lithographed on 70-pound web offset enamel, velvet finish, to provide a printed sample of heatset offset printing. It was run on a 22 3/4 x 35 ATF web press, 10-unit perfecter, with a 10-foot Offen

oven and top running speeds of between 24 and 25 thousand impressions an hour.

Companies which assisted the author and Kimberly-Clark by supplying information, photographs and counsel in the production of the booklet are the Miehle Co., a division of Miehle-Goss-Dexter, Inc.; American Type Founders Co., Inc.; Ryan Co., Chicago; Midwest Printing Co., Minneapolis; and Standard Publishing Co., Cincinnati.

"Heat-set Web Offset" is available from distributors of Kimberly-Clark printing papers or from Kimberly-Clark Corp., Neenah, Wisconsin.

Lithoflow Processor Booklet

A technical bulletin describing the continuous-process Lithoflow sheet film processor has been released by LogEtronics, Inc.

The closed-circuit control system, which automatically agitates, filters, replenishes and circulates the developer, is depicted in schematic drawings in the bulletin.

In addition separate sections of the four-page booklet outline how the processor works, and also give the operating and dimensional specifications of the device. A bulletin may be obtained from the company, 500 E. Monroe Ave., Alexandria, Va.

European Standard Rate

Standard Rate and Data Service, Inc. began publication in Paris, France on Nov. 7 of a French language directory, called *Tarif Media*. In addition, the company announced that a second European directory, to be printed in German and entitled *Media Daten*, will begin publication at Frankfurt am Main, West Germany, in January.

Both publications will be issued six times yearly. Format and layout will be similar to the SRDS American directories and will be printed by direct image offset.

Laury Botthof, company president, said that the new publications will provide French and German advertisers with the first consolidated and complete media service in Europe.

North Star Booklet

Continuing the campaign to publicize its line of North Star coated papers, Oxford Paper Co. recently released another booklet giving information on legends of the north star, and also outlining the qualities of its coated papers.

In the current booklet, Oxford describes the ancient Chinese worship of the north star at the mountain shrine of T'ai Shan. The booklet also describes the qualities of Maineflex Offset Enamel, the paper on which the folder was printed, and Maineflex Offset Enamel Cover.

A copy of booklet may be obtained from Oxford, 230 Park Ave., N.Y.

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REPORT TO NEW YORK

(Continued from Page 84)

statements that will hold up is the fact that, each time a new technique or development is introduced into the industry, a new product usually follows and again we find web-offset widening its scope.

"The range of products being delivered by web-offset today," he continued, "can be measured by the ability and imagination of the people who have faced the problems. They have not accepted what the book says can or can't be done. Web-offset can't use last year's text. It's been outdated by too many new developments. So, the book is thrown away and the printer comes up with a range of products printed in one or multi-colors, on newsprint, groundwood, offset, machine coated, litho coated, and so forth.

Concluding his talk, he enumerated the advantages and disadvantages of the web process as experienced at Mercury Litho. The disadvantages

mentioned include the following:

1. The high cost of initial investment, including installation and auxiliary equipment;
2. Expenses for gas and water;
3. High percentage of stock consumption;
4. Fixed cut-off;
5. Unsuitability of the process for heavyweight papers.

Mr. Levine listed the following advantages:

1. High speeds;
2. Lower binding costs because of folding and finishing operations accomplished on press, such as imprinting, perforating, punching, pasting, collating, sheeting and rewinding;
3. Ability to use a wider range of paper stocks than on other presses.

"LICK THE HICKEY"

(Continued from Page 99)

hickey on both a change of methods and a lack of knowledge. He also believes that rollers should be examined more frequently, preferably periodically. He went on to say that many mechanics today are unfamiliar with their tools, take poor care of their equipment and washup their presses incorrectly.

"Dust and dirt on the press find their way back to the ink fountain, creating mud. This mud in turn finds its way to the sheet, creating more hickey problems. Assuredly there are far fewer hickey problems with clean presses," Mr. Makarius said.

Concluding his talk, he said that there are two other major causes of hickies: excessive use of dryers — dryers should be weighed off accurately — and ink skin in cans. The latter can largely be eliminated by using a proper knife when removing ink, by cleaning the edges of the can and by preventing the formation of an ink skin layer.

In summation, it was agreed that the solving of a particular hickey problem is largely dependent on determining the source. Paper and dampener specks are generally white spots and adhere to the blankets. Ink skin and roller particles are generally black spots and adhere to the plates. However, the majority of technicians

present agreed that the most important factor in the daily hickey battle could be summed up in two simple untechnical words — better house-keeping.

Kimberly-Clark Awards

Nine printers have won awards for submitting winning entries in a national letterhead contest sponsored by Kimberly-Clark Corp., Neenah, Wis.

They are Bankers Lithographing Co., Pittsburgh; John A. Williams, Printer, Dallas; Barnhart Press, Omaha, Neb.; Holerity-Eaton Co., Jackson, Mich.; Commercial Letter, Inc., St. Louis; United Printing Co., Harlingen, Tex.; Carteret Business Forms, Corona, N. Y.; Chamberlain's, Oakland, Calif.; and the printing department of the Ivan Allen Co., Atlanta.

CARL SHEULER has been named manager of Sales and Customer Relation Dept. of Graphic Arts Mutual Insurance Co.

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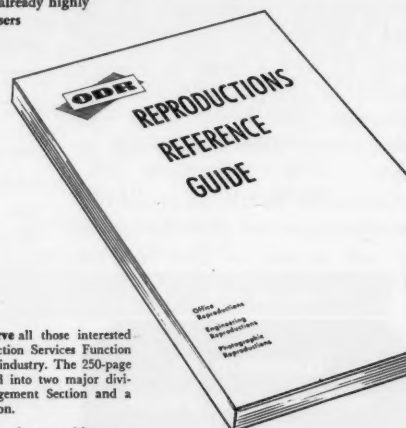
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Street Company
City Zone State
5. Name position or title
Street Company
City Zone State
6. Name position or title
Street Company
City Zone State

INDEX to ADVERTISERS

A	
Aljen, Inc.	114
Aluminum Co. of America	59, 60
American Speed Light Corp.	100
American Type Founders	53
Anchor Chemical Co., Inc.	9, 3rd Cover
Anso 27	
Azoplate Corp.	6

B	
Baldwin-Gegenheimer Co.	8
Bartels Co., Gordon	72
Bell-Hortentstine Co., The	Nov.
Bond Equipment Co.	114
Boyd, H. S. Co.	90
Brown, W. A. Co.	4
Burke & James, Inc.	111
ByChrome Co., Inc.	107

C	
Cantine Co., Martin	76
Carbons, Inc.	114
Carlson Co., Chesley F.	109
Catalytic Combustion Corp.	70
Champion Color	110
Champion Papers	Nov.
Chemco Photo Products Co.	54
Chicago Litho Plate Graining Co.	112
Clary Corp., Graphic Arts Div.	37, 38
Consolidated Water Power & Paper Co.	51
Crabtree, R. W. & Sons, Inc.	Nov.
Crescent Ink and Color Co.	42
Cromwell Paper Co.	Nov.
Crosfield Electronics	Nov.

D	
Davidson Corp.	88
Dayco Dept., Dayton Industrial Products Co.	Nov.
Direct Image Corp.	106
Doyle Paper Cleaners	105
du Pont de Nemours & Co. Inc., E. I.	64, 65

E	
Eastman Kodak Co.	45
Electronic Mechanical Products Co.	Nov.

F	
Flint Ink Corp.	Nov.

G	
General Plate Makers Supply Co.	102
Gevaert Co. of America, Inc., The	2nd Cover
Gilbert Paper Co.	39, 40

Godfrey Roller Co.	48
Goerz American Optical Co., C. P.	Nov.
Goodyear Tire and Rubber Co.	Nov.
Grafco Equipment Co.	47
Graphic Arts Corp. of Ohio	106
Grumbacher Co., M.	Nov.
Gurin-Rapport Co.	7

H	
Hammermill Paper Co.	35, 36
Harris-Seybold, Div. of Harris. Intertype Corp.	Nov.
Hill Rubber Co.	Nov.
Howard Paper Co.	79, 80
Hunt Company, Philip A.	Nov.

I	
Ideal Roller Co.	110
Ilford, Inc.	Nov.
Interchemical Corp.	Nov.

J	
Jomac Products	Nov.

K	
The Kendall Co., Fiber Products Division	Nov.
Kenro Graphics Inc.	Nov.
Kimberly-Clark Corp.	Nov.
Kleenstik Products Co.	Nov.

L	
Langston Unitronics Co.	Nov.
Levey Co., Inc., Fred'k H.	Nov.
Litho Chemical & Supply Co.	Nov.
Ludlow Typograph Co.	Nov.

M	
Manhattan School of Printing	115
Miehle Co., The, Div. of Miehle- Goss Dexter, Inc.	Nov.
Miller Printing Machinery Co.	Nov.
Minnesota Mining & Manufacturing Co.	67

N	
National Association of Photo-Lithographers	94
Natural Lighting Corp.	Nov.
Nekoosa-Edwards Paper Co.	Nov.
Newton Falls Paper Mill Inc.	96
nuArc Co., The	97
Nuclear Products Co.	Nov.

O	
Offen & Co., B.	112
Oxford Paper Co.	Nov.
Oxy-Dry Sprayer Corp.	25

P	
Park Chambers Hotel	111
Pitman, Harold M., Co.	32

R	
Rapid Roller Co.	10
RB and P Chemical and Supply Co.	Nov.
Recht, Wm., Co.	Nov.
Repro-Art Machinery Co.	98
Repro Graphic Machines, Inc.	101
Riegel Paper Co.	Nov.
Roberts, Inc. Lewis	4th Cover
Roberts & Porter, Inc.	3
Robertson Photo Mechanix, Inc.	Nov.
Rollo-O-Graphic Corp.	Nov.
F. P. Rosback Co.	95
Royal Zenith Corp.	Nov.

S	
Saltzman, Inc., J. G.	Nov.
Schmidt, H. & Co.	Nov.
Scriber Specialties	Nov.
Siebold, Inc., J. H. & G. B.	Nov.
Simco Co., The	Nov.
Sinclair & Valentine Co.	30
St. Louis Plate Graining Co.	114
Stevenson Photo Color Co.	112
Strong Electric Corp., The	Nov.
Supreme Photo Supply Co.	Nov.

U	
Ulano Graphic Arts Supplies, Inc.	Nov.
United Mineral & Chemical Co.	Nov.
Union Bag-Camp Paper Corp.	57, 58
U. S. Envelope Co.	92

V	
Voison Restaurant	110

W	
Wagner Litho Machinery Div.	68
Warren Co., S. D.	61, 62
Wausau Paper Mills Co.	Nov.
Wayne Colorplate Co. of Ohio	104
West Virginia Pulp & Paper Co.	82, 83
Western Gear Corp.	74
Willoughby's	115

Y	
Young Brothers Co.	73

(The advertisers' index has been carefully checked but no responsibility can be assumed for errors or omissions)

TALE ENDS

Gutenberg By Offset

SEVERAL readers have written for more information on the replica of the Gutenberg Bible, reported in the November ML (page



87). Two New York rare book dealers published the handsome replica, using lithography and sheet-fed gravure. New City Printing Co., Union City, N. J. printed the text by offset. Photogravure & Color Co., New York, did the color work by gravure. The two-volume set, on 100 percent rag paper, represents a \$300,000 investment for the publishers.

The hand bound sets, measuring 12 x 18½", will sell for \$750. The last sale of an original Gutenberg — of which only 47 known copies survive — brought \$511,000 at auction.

Louis Stark, curator of rare books at the N. Y. Public Library, called the book "an extraordinary facsimile." It was produced entirely by American craftsmen and represents five years of work by its publishers, Henry Chafetz and Sidney Solomon of Cooper Square Publishers.

Chafetz and Solomon conceived the idea of recreating the Gutenberg Bible after an earlier success with a vast off-beat publishing venture: printing the entire Library of Congress Catalog in no less than 167 volumes for \$1,500 a set.

As dealers, they knew that few churches, collectors or librarians could ever pay a half-million dollars or more for an original Gutenberg, and that the 14 originals in U. S. are in private collections or kept under glass in rare book vaults, almost entirely along the Eastern Seaboard. "Since most Americans thus would never see a copy of the world's first printed book, we embarked on the facsimile project," they stated.

What Is Litho?

ML was invited last month to a special press preview of a rather unusual film. Produced by the Amalgamated Lithographers of America, the 12-minute film gets its message across with color, modern jazz (the Chico Hamilton Quintet) and action . . . but no words. The union spent \$35,000 on the movie, which is being shown each day at the ALA litho-

graphic exhibit in Grand Central Terminal, New York. Copies of an expanded version of the movie will be made available to colleges, schools, employer groups, TV stations and the like.

In dramatic color shots (taken at the Eastern Colortype plant) the film shows how the word "LITHO" is designed, photographed, stripped up, printed on the plate and eventually run at high speeds on the offset press.

Edward Swayduck, president of Local 1, ALA, explained that he is "tired of trying to explain what lithography is to everyone I meet."

Biggest Offset Poster

What is described as the largest offset poster in history was produced last month by Western Printing & Lithographing Co., St. Louis, and posted on 10 x 44-foot billboards in 53 markets in the United States for Budweiser. D'Arcy Advertising worked with Western in producing the posters. They replace the usual painted advertisements which were rejected because of the long preparation time and variations in color from one to another. ■



"TALK ABOUT A CLEAN PRESS!!!"

And we mean **REALLY** clean. Here's the easy and thorough way. Anchor's VELVEE and WASH R228 remove the hard, dry ink and gum glaze from the surfaces and out of the pores of rollers and blankets, plus rejuvenating and reconditioning the rubber all at the same time. VELVEE tackles the dirt, lint, and paper dust trapped in gum glaze while it reconditions. WASH R228 cleans away the hard ink glaze and restores the "newness" to your rollers and blankets. Get the top performance and increased printability . . . the faster, cleaner color changes . . . the increased ink mileage . . . the maximum roller and blanket life you need by using regular applications of Anchor's VELVEE and WASH R228. Write for Anchor's folder, "Maintain Top Quality Production," and contact your Anchor Dealer today. A demonstration will prove it's really easy to have a clean press all the time.

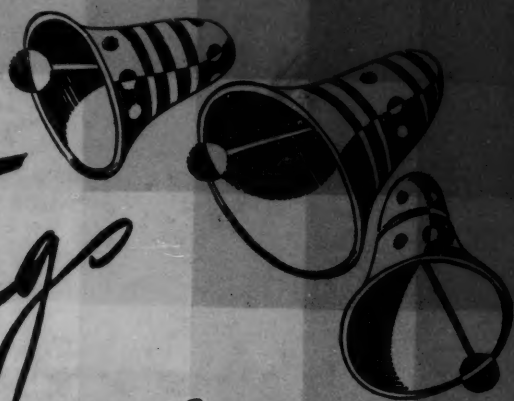


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